

### *Amendments*

#### *In the Specification:*

Please amend paragraph [0084] as follows:

[0084] Fig. 11 (SEQ ID NO: 147) shows the recombination region of pAd/CMV/V5-DEST.

Please amend paragraph [0085] as follows:

[0085] Fig. 12 (SEQ ID NO: 148) shows the recombination region of pAd/PL-DEST.

Please amend paragraph [0089] as follows:

[0089] Fig. 16 (SEQ ID NO: 126) provides the nucleotide sequence of the *OpIE2* promoter.

Please amend paragraph [0090] as follows:

[0090] Fig. 17 (SEQ ID NO: 149) shows the recombination region of pIB/V5-His-DEST.

Please amend paragraph [0119] as follows:

[0119] Fig. 46A (SEQ ID NO: 150) shows the recombination region of pLenti6/V5-DEST. Figure 46B (SEQ ID NO: 151) shows the recombination region of the expression clone resulting from pLenti6/UbC/V5-DEST x entry clone. Figures 46C and 46D (SEQ ID NO: 136) show[[s]] the complete sequence of the UbC promoter.

Please amend paragraph [0120] as follows:

[0120] Fig. 47 (SEQ ID NO: 137) is a schematic representation of directional topoisomerase cloning according to the invention.

Please amend paragraph [0121] as follows:

[0121] Fig. 48 (SEQ ID NO: 152) shows the cloning region of pLenti6/V5-D-TOPO®.

Please amend paragraph [0134] as follows:

[0134] Figures 61A (SEQ ID NO: 153) and 61B (SEQ ID NO: 154) provide the sequences of the recombination

Please amend paragraph [0165] as follows:

[0165] Topoisomerase recognition site. As used herein, the term "topoisomerase recognition site" or "topoisomerase site" means a defined nucleotide sequence that is recognized and bound by a site specific topoisomerase. For example, the nucleotide sequence 5'-(C/T)CCTT-3' (SEQ ID NO: 155) is a topoisomerase recognition site that is bound specifically by most poxvirus topoisomerases, including vaccinia virus DNA topoisomerase I, which then can cleave the strand after the 3'-most thymidine of the recognition site to produce a nucleotide sequence comprising 5'-(C/T)CCTT-PO<sub>4</sub>-TOPO, *i.e.*, a complex of the topoisomerase covalently bound to the 3' phosphate through a tyrosine residue in the topoisomerase (see Shuman, *J. Biol. Chem.* 266:11372-11379, 1991; Sekiguchi and Shuman, *Nucl. Acids Res.* 22:5360-5365, 1994; each of which is incorporated herein by reference; see, also, U.S. Pat. No. 5,766,891; PCT/US95/16099; and PCT/US98/12372 also incorporated herein by reference). In comparison, the nucleotide sequence 5'-GCAACTT-3' (SEQ ID NO: 156) is the topoisomerase recognition site for type IA *E. coli* topoisomerase III.

Please amend paragraph [0213] as follows:

[0213] Sites that may be used in the present invention include att sites. The 15 bp core region of the wildtype att site (GCTTTTTTAT ACTAA (SEQ ID NO: 1)), which is identical in all wildtype att sites, may be mutated in one or more positions. Other att sites that specifically recombine with other att sites can be constructed by altering nucleotides in and near the 7 base pair overlap region, bases 6-12 of the core region. Thus, recombination sites suitable for use in the methods, molecules, compositions, and vectors of the invention include, but are not limited to, those with insertions, deletions or substitutions of one, two, three, four, or more nucleotide bases within the 15 base pair core region (see U.S. Application Nos. 08/663,002, filed June 7, 1996 (now U.S. Patent No. 5,888,732) and 09/177,387, filed October 23, 1998, which describes the core region in further detail, and the disclosures of which are incorporated herein by reference in their entireties). Recombination sites suitable for use in the methods, compositions, and vectors of the invention also include those with insertions, deletions or substitutions of one, two, three, four, or more nucleotide bases within the 15 base pair core region that are at least 50% identical, at least 55% identical, at least 60% identical, at least 65% identical, at least 70% identical, at least 75% identical, at least 80% identical, at least 85% identical, at least 90% identical, or at least 95% identical to this 15 base pair core region.

Please amend paragraph [0215] as follows:

[0215] Analogously, the core regions in attB1, attP1, attL1 and attR1 are identical to one another, as are the core regions in attB2, attP2, attL2 and attR2. Nucleic acid molecules suitable for use with the invention also include those comprising insertions, deletions or substitutions of one, two, three, four, or more nucleotides within the seven base pair overlap region (TTTATAC, bases 6-12 in the core region, SEQ ID NO: 157). The overlap region is defined by the cut sites for the integrase protein and is the region where strand exchange takes place. Examples of such mutants, fragments, variants and derivatives include, but are not limited to, nucleic acid molecules in which (1) the thymine at position 1 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (2) the thymine at position 2 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (3) the thymine at position 3 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (4) the adenine at position 4 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or thymine; (5) the thymine at position 5 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (6) the adenine at position 6 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or thymine; and (7) the cytosine at position 7 of the seven bp overlap region has been deleted or substituted with a guanine, thymine, or adenine; or any combination of one or more (*e.g.*, two, three, four, five, etc.) such deletions and/or substitutions within this seven bp overlap region. The nucleotide sequences of representative seven base pair core regions are set out below.

Please amend paragraph [0216] as follows:

[0216] Altered att sites have been constructed that demonstrate that (1) substitutions made within the first three positions of the seven base pair overlap (TTTATAC, SEQ ID NO: 157) strongly affect the specificity of recombination, (2) substitutions made in the last four positions (TTTATAC, SEQ ID NO: 157) only partially alter recombination specificity, and (3) nucleotide substitutions outside of the seven bp overlap, but elsewhere within the 15 base pair core region, do not affect specificity of recombination but do influence the efficiency of recombination. Thus, nucleic acid molecules and methods of the invention include those comprising or employing one, two, three, four, five, six, eight, ten, or more recombination sites which affect

recombination specificity, particularly one or more (*e.g.*, one, two, three, four, five, six, eight, ten, twenty, thirty, forty, fifty, etc.) different recombination sites that may correspond substantially to the seven base pair overlap within the 15 base pair core region, having one or more mutations that affect recombination specificity. Particularly preferred such molecules may comprise a consensus sequence such as NNNATAC (SEQ ID NO: 158) wherein "N" refers to any nucleotide (*i.e.*, may be A, G, T/U or C). Preferably, if one of the first three nucleotides in the consensus sequence is a T/U, then at least one of the other two of the first three nucleotides is not a T/U.

Please amend paragraph [0217] as follows:

[0217] The core sequence of each att site (attB, attP, attL and attR) can be divided into functional units consisting of integrase binding sites, integrase cleavage sites and sequences that determine specificity. Specificity determinants are defined by the first three positions following the integrase top strand cleavage site. These three positions are shown with underlining in the following reference sequence: CAACTTTTTTATAC AAAGTTG (SEQ ID NO: 2). Modification of these three positions (64 possible combinations) can be used to generate att sites that recombine with high specificity with other att sites having the same sequence for the first three nucleotides of the seven base pair overlap region. The possible combinations of first three nucleotides of the overlap region are shown in Table 1.

Please amend paragraph [0221] as follows:

[0221] For example, mutated att sites that may be used in the practice of the present invention include attB1 (AGCCTGCTTT TTTGTACAAA CTTGT (SEQ ID NO: 3)), attP1 (TACAGGTCAC TAATACCATC TAAGTAGTTG ATTCATAGTG ACTGGATATG TTGTGTTTTA CAGTATTATG TAGTCTGTTT TTTATGCAAA ATCTAATTTA ATATATTGAT ATTTATATCA TTTTACGTTT CTCGTTTCAGC TTTTTTGTAC AAAGTTGGCA TTATAAAAAA GCATTGCTCA TCAATTTGTT GCAACGAACA GGTCACATC AGTCAAAATA AAATCATTAT TTG (SEQ ID NO: 4)), attL1 (CAAATAATGA TTTTATTTTG ACTGATAGTG ACCTGTTCGT TGCAACAAAT TGATAAGCAA TGCTTTTTTA TAATGCCAAC TTTGTACAAA AAAGCAGGCT (SEQ ID NO: 5)), and attR1 (ACAAGTTTGT ACAAAAAAGC TGAACGAGAA ACGTAAAATG ATATAAATAT CAATATATTA AATTAGATT TGCATAAAAA ACAGACTACA



TAATACTGTA AAACACAACA TATCCAGTCA CTATG (SEQ ID NO: 6). Table 3 provides the sequences of the regions surrounding the core region for the wild type att sites (attB0, P0, R0, and L0) as well as a variety of other suitable recombination sites. Those skilled in the art will appreciate that the remainder of the site may be the same as the corresponding site (B, P, L, or R) listed above.

Table 3. Nucleotide sequences of att sites.		
attB0	AGCCTGCTTT TTTATACTAA CTTGAGC	(SEQ ID NO: <u>7</u> )
attP0	G TTCAGCTTT TTTATACTAA GTTGGCA	(SEQ ID NO: <u>8</u> )
attL0	AGCCTGCTTT TTTATACTAA GTTGGCA	(SEQ ID NO: <u>9</u> )
attR0	G TTCAGCTTT TTTATACTAA CTTGAGC	(SEQ ID NO: <u>10</u> )
attB1	AGCCTGCTTT TTTGTACAAA CTTGT	(SEQ ID NO: <u>11</u> )
attP1	G TTCAGCTTT TTTGTACAAA GTTGGCA	(SEQ ID NO: <u>12</u> )
attL1	AGCCTGCTTT TTTGTACAAA GTTGGCA	(SEQ ID NO: <u>13</u> )
attR1	G TTCAGCTTT TTTGTACAAA CTTGT	(SEQ ID NO: <u>14</u> )
attB2	ACCCAGCTTT CTTGTACAAA GTGGT	(SEQ ID NO: <u>15</u> )
attP2	G TTCAGCTTT CTTGTACAAA GTTGGCA	(SEQ ID NO: <u>16</u> )
attL2	ACCCAGCTTT CTTGTACAAA GTTGGCA	(SEQ ID NO: <u>17</u> )
attR2	G TTCAGCTTT CTTGTACAAA GTGGT	(SEQ ID NO: <u>18</u> )
attB5	CAACTTTATT ATACAAAGTT GT	(SEQ ID NO: <u>19</u> )
attP5	G TTCAACTTT ATTATACAAA GTTGGCA	(SEQ ID NO: <u>20</u> )
attL5	CAACTTTATT ATACAAAGTT GGCA	(SEQ ID NO: <u>21</u> )
attR5	G TTCAACTTT ATTATACAAA GTTGT	(SEQ ID NO: <u>22</u> )
attB11	CAACTTTTCT ATACAAAGTT GT	(SEQ ID NO: <u>23</u> )
attP11	G TTCAACTTT TCTATACAAA GTTGGCA	(SEQ ID NO: <u>24</u> )
attL11	CAACTTTTCT ATACAAAGTT GGCA	(SEQ ID NO: <u>25</u> )
attR11	G TTCAACTTT TCTATACAAA GTTGT	(SEQ ID NO: <u>26</u> )

Table 3. Nucleotide sequences of att sites.		
attB17	CAACTTTTGT ATACAAAGTT GT	(SEQ ID NO: <u>27</u> )
attP17	GTTCAACTTT TGTATACAAA GTTGGCA	(SEQ ID NO: <u>28</u> )
attL17	CAACTTTTGT ATACAAAGTT GGCA	(SEQ ID NO: <u>29</u> )
attR17	GTTCAACTTT TGTATACAAA GTTGT	(SEQ ID NO: <u>30</u> )
attB19	CAACTTTTTC GTACAAAGTT GT	(SEQ ID NO: <u>31</u> )
attP19	GTTCAACTTT TTCGTACAAA GTTGGCA	(SEQ ID NO: <u>32</u> )
attL19	CAACTTTTTC GTACAAAGTT GGCA	(SEQ ID NO: <u>33</u> )
attR19	GTTCAACTTT TTCGTACAAA GTTGT	(SEQ ID NO: <u>34</u> )
attB20	CAACTTTTTC GTACAAAGTT GT	(SEQ ID NO: <u>35</u> )
attP20	GTTCAACTTT TTGGTACAAA GTTGGCA	(SEQ ID NO: <u>36</u> )
attL20	CAACTTTTTC GTACAAAGTT GGCA	(SEQ ID NO: <u>37</u> )
attR20	GTTCAACTTT TTGGTACAAA GTTGT	(SEQ ID NO: <u>38</u> )
attB21	CAACTTTTTC ATACAAAGTT GT	(SEQ ID NO: <u>39</u> )
attP21	GTTCAACTTT TTAATACAAA GTTGGCA	(SEQ ID NO: <u>40</u> )
attL21	CAACTTTTTC ATACAAAGTT GGCA	(SEQ ID NO: <u>41</u> )
attR21	GTTCAACTTT TTAATACAAA GTTGT	(SEQ ID NO: <u>42</u> )

Please amend paragraph [0224] as follows:

[0224] The att system core integrase binding site comprises an interrupted seven base pair inverted repeat having the following nucleotide sequence:

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caactttnnnnnnnaagttg (SEQ ID NO: 43 39),

as well as variations thereof which can comprise either perfect or imperfect repeats.

Please amend paragraph [0227] as follows:

[0227] For example, it is believed that an attB site altered to have the following nucleotide sequence:

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caacttttnnnnnnnaacaag (SEQ ID NO: 44 40),

will functionally interact with a cognate attP and generate attL and attR. However, whichever of the latter two recombination sites acquires the segment containing "caag" (located on the left side of the sequence shown above) will be rendered non-functional to subsequent recombination events. The above is only one of many possible alterations in the core integrase binding sequence which can render att sites non-functional after engaging in a single recombination event. Thus, single use recombination sites may be prepared by altering nucleotides in the seven base pair inverted repeat regions which abut seven base pair overlap regions of att sites. This region is represented schematically as:

CAAC TTT [Seven Base Pair Overlap Region] AAA GTTG.

Please amend paragraph [0228] as follows:

[0228] In generating single use recombination sites, one, two, three, four or more of nucleotides of the sequences CAACTTT (SEQ ID NO: 161) or AAAGTTG (SEQ ID NO: 162) (*i.e.*, the seven base pair inverted repeat regions) may be substituted with other nucleotides or deleted altogether. These seven base pair inverted repeat regions represent complementary sequences with respect to each other. Thus, alterations may be made in either seven base pair inverted repeat region in order to generate single use recombination sites. Further, when DNA is double stranded and one seven base pair inverted repeat region is present, the other seven base pair inverted repeat region will also be present on the other strand.

Please amend paragraph [0229] as follows:

[0229] Using the sequence CAACTTT (SEQ ID NO: 161) for illustration, examples of seven base pair inverted repeat regions which can form single use recombination sites include, but are not limited to, nucleic acid molecules in which (1) the cytosine at position 1 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, adenine, or thymine; (2) the adenine at position 2 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or thymine; (3) the adenine at position 3 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or thymine; (4) the cytosine at position 4 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, adenine, or thymine; (5) the thymine at position 5 of the seven base

pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or adenine; (6) the thymine at position 6 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or adenine; and (7) the thymine at position 7 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or adenine; or any combination of one, two, three, four, or more such deletions and/or substitutions within this seven base pair region. Representative examples of nucleotide sequences of the above described seven base pair inverted repeat regions are set out below in Table 4.

Please amend paragraph [0256] as follows:

[0256] Type IA topoisomerases include *E. coli* topoisomerase I, *E. coli* topoisomerase III, eukaryotic topoisomerase II, archeal reverse gyrase, yeast topoisomerase III, *Drosophila* topoisomerase III, human topoisomerase III, *Streptococcus pneumoniae* topoisomerase III, and the like, including other type IA topoisomerases (see Berger, *Biochim. Biophys. Acta* 1400:3-18, 1998; DiGate and Mariani, *J. Biol. Chem.* 264:17924-17930, 1989; Kim and Wang, *J. Biol. Chem.* 267:17178-17185, 1992; Wilson, *et al.*, *J. Biol. Chem.* 275:1533-1540, 2000; Hanai, *et al.*, *Proc. Natl. Acad. Sci., USA* 93:3653-3657, 1996, U.S. Pat. No. 6,277,620, each of which is incorporated herein by reference). *E. coli* topoisomerase III, which is a type IA topoisomerase that recognizes, binds to and cleaves the sequence 5'-GCAACTT-3' (SEQ ID NO: 156), can be particularly useful in a method of the invention (Zhang, *et al.*, *J. Biol. Chem.* 270:23700-23705, 1995, which is incorporated herein by reference). A homolog, the traE protein of plasmid RP4, has been described by Li, *et al.*, *J. Biol. Chem.* 272:19582-19587 (1997) and can also be used in the practice of the invention. A DNA-protein adduct is formed with the enzyme covalently binding to the 5'-thymidine residue, with cleavage occurring between the two thymidine residues.

Please amend paragraph [0358] as follows:

[0358] Fig. 6 is a plasmid map of the pAd/CMV/V5-DEST vector, one example of a nucleic acid comprising all or a portion of a viral genome according to the present invention. The nucleotide sequence of the plasmid is provided in Table 6 (SEQ ID NO: 83). The plasmid contains the first 458 nucleotides of Ad5, including the left ITR and packaging sequence, followed the cytomegalovirus promoter (CMV) and the T7 promoter. The promoters are followed by a sequence containing selectable markers flanked by recombination sites attR1 and

attR2. Any other suitable pair of recombination sites might be employed as long as they are selected so as not to recombine with each other. After the attR2 site, the V5 epitope coding sequence is followed by stop codons in all three reading frames and the herpes virus thymidine kinase polyadenylation signal. This is followed by the nucleotides from position 3513 to the right end of the adenoviral genome including the right ITR. After the adenoviral sequences, are plasmid sequences including a plasmid origin of replication followed by the ampicillin resistance gene. The plasmid sequences are flanked by PacI restriction enzyme recognition sites. Thus, after replacement of the replaceable sequence with a sequence of interest flanked by attL1 and attL2 in a recombination reaction, an infectious viral genome can be prepared by digestion of the recombination reaction product with PacI to remove the plasmid sequences. In this particular embodiment, the viral genome is an adenoviral genome deleted in the E1 and E3 regions. The E1 function must be supplied *in trans* in order for the virus to replicate, for example, from the host cell as in 293 cells. The gene products of the E3 region are not required for replication.

Please amend paragraph [0374] as follows:

[0374] A recombinant adenoviral vector was constructed that expresses a suppressor tRNA. A map of a plasmid containing the adenoviral construct pAd-GW-TO/tRNA in which a suppressor tRNA is under the control of a tetracycline-inducible CMV promoter is shown in Fig. 7. The nucleotide sequence of pAd-GW-TO/tRNA is provided in Table 7 (SEQ ID NO: 84). An additional adenoviral construct expressing a suppressor tRNA is pAdenoTAG tRNA shown in Fig. 8. The nucleotide sequence of pAdenoTAG tRNA is provided in Table 8 (SEQ ID NO: 85). Table 9 (SEQ ID NO: 86) provides the nucleotide sequence of a Sau3A fragment that may be used to construct suppressor tRNA containing nucleic acid molecules of the invention (*e.g.*, pAdenoTag tRNA.) A transcription terminator is located at bases 600 to 606 of the fragment, the sequence corresponding to the suppressor tRNA is located at bases 512 to 593 of the fragment, the anti-codon is located at bases 545 to 547, and the tetracycline operator sequence is located at bases 474 to 511. The suppressor tRNA produced from this sequence suppresses the amber stop codon UAG. Those skilled in the art will appreciate that it is possible to prepare suppressors for opal and ochre stop codons by mutating the bases in the anti-codon to make the anti-codon the reverse complement of the stop codon. *i.e.*, TCA for the opal stop codon and TTA for the ochre stop codon. Other anti-codons may be used, for example, those employing

other bases in the wobble position. Constructing a suitable sequence from which to produce a desired suppressor tRNA (*e.g.*, by introducing one or more point mutations in a sequence) is routine in the art.

Please amend paragraph [0378] as follows:

[0378] A plasmid map of pAd/PL-DEST<sup>™</sup> is provided in Figure 9 and the sequence of the plasmid is provided in Table 10 (SEQ ID NO: 87).

Please amend paragraph [0379] as follows:

[0379] A kit may also comprise one or more control reagents. For example, a kit may comprise an adenoviral vector comprising a detectable marker that may be used as a control for transfection of cells and infection of cells. One suitable control reagent is pAd/CMV/V5-GW/*lacZ* control. A map of the pAd/CMV/V5-GW/*lacZ* plasmid is provide as Fig. 10 and the nucleotide sequence of the plasmid is provided as Table 11 (SEQ ID NO: 88).

Please amend paragraph [0384] as follows:

[0384] The pAd/CMV/V5-DEST<sup>™</sup> vector (36686 bp, SEQ ID NO: 83) contains the following features.

Please amend paragraph [0384] as follows:

[0384] The pAd/PL-DEST<sup>™</sup> vector (34864 bp, SEQ ID NO: 87) contains the following features.

Please amend paragraph [0387] as follows:

[0387] The plasmid, pAd/CMV/V5-GW/*lacZ*, is included and may be used as a positive expression control in the mammalian cell line of choice. pAd/CMV/V5-GW/*lacZ* (Fig. 10) is a 37567 bp vector (SEQ ID NO: 88) expressing  $\beta$ -galactosidase, and was generated using the GATEWAY<sup>™</sup> LR recombination reaction between an entry clone containing the *lacZ* gene and pAd/CMV/V5-DEST<sup>™</sup>.  $\beta$ -galactosidase is expressed as a C-terminal V5 fusion polypeptide with a molecular weight of approximately 120 kDa.

Please amend paragraph [0394] as follows:

[0394] pAd/CMV/V5-DEST<sup>™</sup> is a C-terminal fusion vector; however, this vector may be used to express native polypeptides or C-terminal fusion polypeptides. A sequence of interest encoding a polypeptide of interest must contain an ATG initiation codon in the context of a Kozak consensus sequence for proper initiation of translation in mammalian cells (Kozak, M. (1987). *Nucleic Acids Res.* 15, 8125-8148. Kozak, M. (1991). *J. Cell Biology* 115, 887-903. Kozak, M. (1990). *Proc. Natl. Acad. Sci. USA* 87, 8301-8305.). An example of a Kozak consensus sequence is (G/A)NNATGG (SEQ ID NO: 159). The ATG initiation codon is underlined. Note that other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold).

Please amend paragraph [0400] as follows:

[0400] To confirm that a sequence of interest is in the correct orientation and in frame with a fusion tag (if present), an expression construct may be sequenced. The following primer binding may be used to sequence an expression construct. Refer to the Figs. 8 and 9 for the location of the primer binding sites. The pAd/CMV/V5-DEST<sup>™</sup> vector contains the T7 promoter/priming site 5'-TAATACGACTCACTATAGGG-3' (SEQ ID NO: 45) and the V5 (C-term) reverse priming site 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 46). The pAd/PL-DEST<sup>™</sup> vector contains the pAd forward priming site 5'-GACTTTGACCGTTTACGTGGAGAC-3' (SEQ ID NO: 47) and the pAd reverse priming site 5'-CCTTAAGCCACGCCCACACATTTC-3' (SEQ ID NO: 48).

Please amend paragraph [0493] as follows:

[0493] Nucleic acid molecules of the invention may be used to express a polypeptide of interest as part of a fusion polypeptide. Numerous suitable fusion partners are known to those in the art. For example a polypeptide of interest may be expressed as a fusion polypeptide containing the V5 epitope. Antibodies to detect the V5 epitope, a 14 amino acid epitope derived from the P and V proteins of the paramyxovirus, SV5 having the sequence GKPIPNPLLGLDST (SEQ ID NO: 49) (Southern, J.A., *et al.*, *J. Gen. Virol.* 72:1551-1557 (1991)) are commercially available from Invitrogen Corporation, Carlsbad, CA, for example, Anti-V5 Antibody catalog no. R960-25, Anti-V5-HRP Antibody catalog no. R961-25, and catalog no. Anti-V5-AP Antibody R962-

25. A polypeptide of interest may be expressed as a fusion polypeptide with a polyhistidine sequence. Antibodies to detect a polyhistidine sequence are commercially available from Invitrogen Corporation, Carlsbad, CA. For example, Anti-His(C-term) Antibody catalog no. R930-25, Anti-His(C-term)-HRP Antibody catalog no. R931-25, and Anti-His(C-term)-AP Antibody R932-25, all of which detect a C-terminal polyhistidine (6xHis) tag and require the free carboxyl group for detection (*i.e.*, detect the sequence HHHHHH-COOH (SEQ ID NO: 165), see Lindner, P., *et al.*, *BioTechniques* 22:140-149 (1997)).

Please amend paragraph [0493] as follows:

[0493] pIB/V5-His-DEST contains the following features:

A map of pIB/V5-His-DEST is provided in Figure 15 and the nucleotide sequence of the vector is provided in Table 12 (SEQ ID NO: 89).

Please amend paragraph [0498] as follows:

[0498] Baculovirus immediate-early promoters utilize the host cell transcription machinery and do not require viral factors for activation. The *OpIE2* promoter is from the baculovirus *Orgyia pseudotsugata* multicapsid nuclear polyhedrosis virus (*OpMNPV*) and drives constitutive expression of the gene of interest in pIB/V5-His-DEST. The virus' natural host is the Douglas fir tussock moth; however, the promoter allows protein expression in *Lymantria dispar* (LD652Y), *Spodoptera frugiperda* cells (Sf9) (Hegedus, D.D., *et al.*, *Gene* 207:241-249 (1998); Pfeifer, T.A., *et al.*, *Gene* 188:183-190 (1997)), Sf21 (Invitrogen), *Trichoplusia ni* (High Five™, Invitrogen Corporation, Carlsbad, CA), *Drosophila* (Kc1, S2) (Hegedus, D.D., *et al.*, *Gene* 207:241-249 (1998); Pfeifer, T.A., *et al.*, *Gene* 188:183-190 (1997)) and mosquito cell lines. The *OpIE2* promoter has been sequenced and analyzed. The sequence of the promoter is provided in Figure 16 (SEQ ID NO: 126).

Please amend paragraph [0500] as follows:

[0500] The *OpIE2* promoter has been analyzed by deletion analysis using a CAT reporter in both *Lymantria dispar* (LD652Y) and *Spodoptera frugiperda* (Sf9) cells. Expression in Sf9 cells was much higher than in LD652Y cells. Deletion analysis revealed that sequence up to -275 base pairs from the start of transcription is necessary for maximal expression (Theilmann, D.A., and Stewart, S., *Virology* 187:84-96 (1992)). Additional sequence beyond -275 may broaden the



host range expression of this plasmid to other insect cell lines. In addition, an 18 bp element appears to be required for expression. This 18 bp element is repeated almost completely in three different locations and partially at six other locations. These are marked in Fig. 16 (SEQ ID NO: 126). Elimination of the three major 18 bp elements reduces expression to basal levels (Theilmann, D.A., and Stewart, S., *Virology* 187:84-96 (1992)). Primer extension experiments revealed that transcription initiates equally from either the C or the A indicated. These two transcriptional start sites are adjacent to a CAGT sequence motif that has been shown to be conserved in a number of early genes (Blissard, G.W., and Rohrmann, G.F., *Virology* 170:537-555 (1989)).

Please amend paragraph [0506] as follows:

[0506] A sequence of interest may contain a Kozak consensus sequence with an ATG initiation codon for proper initiation of translation (Kozak, M., *Nucleic Acids Res.* 15:8125-8148 (1987); Kozak, M., *J. Cell Biology* 115:887-903 (1991); Kozak, M., *Proc. Natl. Acad. Sci. USA* 87:8301-8305 (1990)). An example of a Kozak consensus sequence is provided below. Other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold). The ATG initiation codon is shown underlined.

(G/A)NN**ATGG** (SEQ ID NO: 159)

Please amend paragraph [0511] as follows:

[0511] The recombination region of the expression clone resulting from pIB/V5-His-DEST × entry clone is shown in Fig. 17 (SEQ ID NO: 149). Shaded regions correspond to those DNA sequences transferred from the entry clone into pIB/V5-His-DEST by recombination. Non-shaded regions are derived from the pIB/V5-His-DEST vector. The underlined nucleotides flanking the shaded region correspond to bases 609 and 2292, respectively, of the pIB/V5-His-DEST vector sequence.

Please amend paragraph [0512] as follows:

[0512] To confirm that a coding sequence on the sequence of interest is in frame with the C-terminal V5 epitope and polyhistidine tag, the expression construct may be sequenced, for

example, using the OpIE2 Forward and Reverse primer sequences. Refer to Fig. 17 (SEQ ID NO: 149) for the sequence and location of the primer binding sites.

Please amend paragraph [0564] as follows:

[0564] A baculovirus genome containing a recombination cassette (DEST) bounded by attR recombination sites compatible with GATEWAY™ entry vectors (Invitrogen Corporation, Carlsbad, CA) was constructed. Two transposition cassettes were constructed one with and one without the mellitin leader sequence. A schematic representation of the cassette without the mellitin sequence is provided in Fig. 19A and the sequence is provided in Table 13 (SEQ ID NO: 90). A schematic representation of the cassette with the mellitin sequence is provided in Fig. 19B and the sequence is provided in Table 14 (SEQ ID NO: 91). The DEST cassettes contain the HSV thymidine kinase (TK) gene driven by an immediate early promoter (IE-0 promoter) and the lacZ gene driven by a late promoter (P10 promoter). The genes permit identification of non-recombinant virus using a blue white screening protocol and selection against non-recombinant viruses using ganciclovir. The cassettes also contain the V5 epitope and a 6-Histidine sequence outside the attR2 recombination site. The sequence of the cassette contains a recognition site for the restriction enzyme *Bsu36I* (and its isoschizomer *AocI*) that is used to linearize the viral genome.

Please amend paragraph [0572] as follows:

[0572] In some embodiments, the promoters are tightly regulated. For example, in some embodiments, the promoters are not active unless one or more transactivators are present. In some embodiments, the nucleic acid sequences that function as promoters include, but are not limited to, the AcMNPV ORF 25 promoter sequence (SEQ ID NO: 98), the AcMNPV lef 3 promoter sequence (SEQ ID NO: 99), the AcMNPV TLP promoter sequence (SEQ ID NO: 100), the AcMNPV homologous repeat 5 sequence (SEQ ID NO: 101), other baculovirus homologous repeat sequences, and the like. The nucleic acid sequences of the AcMNPV ORF 25 promoter sequence (SEQ ID NO: 98), the AcMNPV lef 3 promoter sequence (SEQ ID NO: 99), the AcMNPV TLP promoter sequence (SEQ ID NO: 100), and the AcMNPV homologous repeat 5 sequence (SEQ ID NO: 101) are provided in Table 15 (SEQ ID NOS: 98-101).

Please amend paragraph [0573] as follows:

[0573] In some embodiments, the promoters discussed above are not active unless one or more transactivators are present. One suitable transactivator is the baculoviral IE-1 protein. The IE-1 promoter sequence (SEQ ID NO: 102), coding sequence (SEQ ID NO: 103), and polypeptide sequence (SEQ ID NO: 104) are provided in Table 16 (SEQ ID NOS: 102-104). The transactivator may be provided on the same nucleic acid molecule comprising the promoter sequence or on another nucleic acid molecule (*e.g.*, plasmid, virus, host cell genome, etc.). In some embodiments, the promoter sequence operably linked to a sequence of interest may be on one nucleic acid molecule (*e.g.* a plasmid) and the transactivator sequence may be on a different nucleic acid molecule (*e.g.*, a virus such as a baculovirus). The nucleic acid molecule comprising the promoter sequence operably linked to a sequence of interest may be introduced into a host cell, for example, by transfection. The sequence of interest is not expressed or is substantially not expressed in the absence of a transactivator. In some embodiments, the host cell may be a eukaryotic cell, for example, a mammalian cell or an insect cell. The host cell comprising the nucleic acid molecule comprising the promoter sequence operably linked to a sequence of interest may be further contacted with a second nucleic acid molecule comprising the a sequence encoding the transactivator. Upon expression of the transactivator, the sequence of interest is expressed. In some embodiments, the transactivator polypeptide may be directly transfected into cells comprising the nucleic acid molecule comprising the promoter sequence operably linked to a sequence of interest. Such transactivator polypeptides may be present as native polypeptides or as fusion polypeptides, for example, as fusions with the herpesvirus VP22 polypeptide.

Please amend paragraph [0576] as follows:

[0576] The sequences provided in Table 15 (SEQ ID NOS: 98-101) are capable of functioning as conditionally activated promoters. The present invention also comprises portions of the sequences of Table 15 (SEQ ID NOS: 98-101) that function as conditionally active promoters. Such promoters may be activated by the IE-1 polypeptide. Such portions may comprise at least 50%, 60%, 70%, 80%, 90%, 95%, or more of one or more of the sequences in Table 15 (SEQ ID NOS: 98-101).

Please amend paragraph [0578] as follows:

[0578] The OpIE-1 promoter was replaced with long or short versions of AcMNPV gp64 or pe38 promoters, using a Topoisomerase I mediated ligation strategy (Fig. 21). The AcMNPV gp64 and pe38 promoters were amplified from cosmid #58 (comprising AcMNPV bases 99803-132856 from a cosmid library of the AcMNPV genome, Harwood *et al.* Virology. 250:113-134, 1998) with promoter-specific primers that were appended at their 5' ends with antisense TOPO sites and six additional bases (Fig. 21). pIB/V5-His was amplified with primers that included an anti-sense topoisomerase site and a six base sequence that becomes an overhang following topoisomerase binding. Each promoter (gp64s is illustrated) was amplified with similarly designed primers. Following binding, the overhangs annealed and were ligated by the enzyme. The oligonucleotide sequences are given below. The antisense topoisomerase sites are underlined.

17852 pIB Neg For TGAGTCAAAGGGCTGCCGGGCTGCAGCACTG (SEQ ID NO: 51)  
17853 pIB Neg Rev CGGAACAAAGGGCATGACCAAAATCCCTTAACG (SEQ ID NO: 52)  
17849 gp64 For GACTCAAAAGGGCTTGCTTGTGTGTTCTTATTG (SEQ ID NO: 53)  
17850 gp64s Rev GTTCCGAAAGGGTTGTGTCACGTAGGCCAGATAAC (SEQ ID NO: 54)  
17851 gp64L Rev GTTCCGAAAGGGAATAATCGATTAAAGGGTGTAATACTC (SEQ ID NO: 55)  
17857 pe38 For GACTCAAAAGGGTTTGCTTATTGGCAGGCTCTCC (SEQ ID NO: 56)  
17858 pe38s Rev GTTCCGAAAGGGTATCTGTCCCCCACTCAGGC (SEQ ID NO: 57)  
17859 pe38L Rev GTTCCGAAAGGGTAAAGTTGATGCGGCGACGGC (SEQ ID NO: 58)

Please amend paragraph [0598] as follows:

[0598] The plasmid pVL1393 GST p10 stop (Fig. 34) was digested with *Bam*HI and *Nco*I. A 15 kb band was purified (removing the GST tag) to which was ligated, a double stranded oligonucleotide containing the melittin signal flanked by *Bam*H1 and *Nco*I overhangs. The ligated products were transformed into TOP10 bacteria and the correct clones verified by restriction digestion and sequencing. This plasmid (pVL1393 Mel Stop) contained a stop codon downstream of the *attR2* site that had to be removed by PCR directed site-specific mutagenesis. Primers *Eco*RI sense (GAATTCCAGCTGAGCGCCGGTCGCTAC SEQ ID NO: 59) and *Bgl*II antisense (AGATCTTCATTCACTTCACTTTGTACAAG SEQ ID NO: 60) were used to

amplify a fragment from pVL1393 Mel Stop, and the resulting 209 bp fragment was cut with *EcoRI* and *BglIII*, and then ligated to pVL1393 Mel Stop cut with the same enzymes. The correct clone was identified by restriction digestion and sequence analysis. This gave pVL1393 Mel no-Stop.

Please amend paragraph [0599] as follows:

[0599] Next, a V5-His tag was added downstream of the *attR2* site. The V5/His sequence was amplified from pIND/V5-His-TOPO (catalog no. K101001, Invitrogen Corporation, Carlsbad, CA) with primers containing *BglIII* sites at each 5' end (V5/His 5': AGATCTGGGGAAGCCTATCCCTAACCC SEQ ID NO: 61; V5/His 3': AGATCTTCAATGGTGATGGTGATGATGACCGG SEQ ID NO: 62). The amplicon was cloned into pCR2.1 TOPO TA and then removed by *BglIII* digestion and ligated to pVL1393 Mel no-Stop cut with *BglIII*. The correct clones were identified and verified by sequencing. This resulted in plasmid pVL1393 Mel/V5-His. The melittin signal was subsequently removed by replacing the melittin-*attR1* sequence from pVL1393 Mel/V5-His with the *attR1* sequence from pVL1393-Native, using *NotI* and *BamHI*. The correct plasmid clones were verified by sequencing and dubbed pVL1393 V5/His. Fig. 27 shows a schematic of the strategy for construction of BaculoDirect™ DNA. In Fig. 27A, the GATEWAY™ counter selection cassette was cloned in the polyhedrin locus of wt AcMPPV by homologous recombination between with pVL1393 V5-His. The resulting virus DNA contains the counter selection cassette bounded by *attR* sites, immediately downstream of the polyhedrin promoter and upstream of the V5/His tag. In Fig. 27B, LR recombination between BaculoDirect™ DNA and an entry clone results in an expression virus in which the counter selection cassette is replaced by gene of interest.

Please amend paragraph [0626] as follows:

[0626] The present invention permits one skilled in the art to create replication-incompetent lentiviruses to deliver and express one or more sequences of interest (*e.g.*, genes). These viruses (based loosely on HIV-1) can effectively transduce dividing and non-dividing mammalian cells (in culture or *in vivo*), thus broadening the possible applications beyond those of traditional Moloney (MLV)-based retroviral systems (Clontech, Stratagene, etc.). Directional TOPO and GATEWAY™ lentiviral vectors have been created to clone one or more genes of interest with a V5 epitope, if desired. The vectors also carry the blasticidin resistance gene (*bsd*) to allow for

the selection of transduced cells. Without additional modifications, these vectors can theoretically accommodate up to ~6 kb of foreign gene. Three supercoiled packaging plasmids (gag/pol, rev and VSV-G envelope) are provided to supply helper functions and viral proteins in *trans*. Finally, an optimized producer cell line (293FT) is provided that will facilitate production of high titer virus. A schematic representation of the production of a nucleic acid molecule comprising all or a portion of a lentiviral genome is shown in Figure 35. Plasmid maps of vectors adapted for use with GATEWAY™ and topoisomerase cloning in the production of nucleic acid molecules comprising all or a portion of a lentiviral genome are shown in Figures 36A (pLenti6/V5-DEST), 36B (pLenti6/V5-D-TOPO®), 36C (pLenti4/V5-DEST), and 36D (pLenti6/UbC/V5-DEST) respectively. The nucleotide sequences of the plasmids are provided in Tables 17-20 (SEQ ID NOS: 105-108, respectively). Plasmid maps of the three packaging plasmids pLP1, pLP2, and pLP/VSVG are shown in Figures 37A, 37B, and 37C respectively and the nucleotide sequences of these plasmids are provided as Tables 21 (SEQ ID NO: 109), 22 (SEQ ID NO: 110), and 23 (SEQ ID NO: 111), respectively.

Please amend paragraph [0634] as follows:

[0634] The oligonucleotides used for directional adaptation are listed below:

EcoRI (5' end): Non-regenerative site

Topo-D1 5' P-AATTGATCCCTTCACCGACATAGTACAG 3' (SEQ ID NO: 63)

Topo-D2 5' P-GGTGAAGGGATC 3' (SEQ ID NO: 64)

XhoI (3' end): Regenerative site

Topo-D6 5' P-TCGAGCCCTTGACATAGTACAG 3' (SEQ ID NO: 65)

Topo-D7\* 5' P-AAGGGC 3' (SEQ ID NO: 66)

Please amend paragraph [0776] as follows:

[0776] Table 26 provides some of the characteristics of the vector pLP2. The complete sequence is provided as Table 22 (SEQ ID NO: 110). A plasmid map is provided as Figure 37B.

Please amend paragraph [0777] as follows:

[0777] Table 27 provides some of the characteristics of the vector pLP/VSVG. The complete sequence is provided as Table 23 (SEQ ID NO: 111). A plasmid map is provided as Figure 37C.

Please amend paragraph [0781] as follows:

[0781] pLenti6/V5-DEST™ is an 8.7 kb vector adapted for use with the GATEWAY™ Technology, and is designed to allow high-level expression of recombinant fusion proteins in dividing and non-dividing mammalian cells using Invitrogen's ViraPower™ Lentiviral Expression System. A map of the vector is provided as Figure 36A and the sequence of the vector is provided as Table 17 (SEQ ID NO: 105).

Please amend paragraph [0784] as follows:

[0784] The pLenti4/V5-DEST and pLenti6/V5-DEST vectors use the human CMV immediate early promoter to allow high-level, constitutive expression of the gene of interest in mammalian cells (Andersson *et al.*, 1989; Boshart *et al.*, 1985; Nelson *et al.*, 1987). The sequence of the pLenti4/V5-DEST plasmid is provided as Table 19 (SEQ ID NO: 107). Although highly active in most mammalian cell lines, activity of the viral CMV promoter can be down-regulated in some cell lines due to methylation (Curradi *et al.*, 2002, *Mol. Cell. Biol.* 22, 3157-3173), histone deacetylation (Rietveld *et al.*, 2002, *EMBO J.* 21, 1389-1397), or both.

Please amend paragraph [0785] as follows:

[0785] The pLenti6/UbC/V5-DEST vector uses the human UbC promoter to allow constitutive, but more physiological levels of expression from the gene of interest in mammalian cells (Marinovic *et al.*, 2000, *Biophys. Res. Comm.* 274, 537-541). The sequence of the pLenti6/UbC/V5-DEST plasmid is provided as Table 20 (SEQ ID NO: 108). When compared to the CMV promoter, the UbC promoter is generally 2-4 fold less active. The UbC promoter is not down-regulated, making it useful for transgenic studies (Gill *et al.*, 2001, *Gene Ther.* 8, 1539-1546; Lois *et al.*, 2002, *Science* 295, 868-872; Marinovic *et al.*, 2000; Schorpp *et al.*, 1996, *Nuc. Acids Res.* 24, 1787-1788; Yew *et al.*, 2001, *Mol. Ther.* 4, 75-82). The human ubiquitin C (UbC) promoter (in pLenti6/UbC/V5-DEST) allows high-level expression of recombinant protein in most mammalian cell lines (Wulff *et al.*, 1990, *FEBS Lett.* 261, 101-105) and in virtually all tissues tested in transgenic mice (Schorpp *et al.*, 1996). The diagram below shows the features of the UbC promoter as described by Neno *et al.*, 1996 *Gene* 175, 179-185.

Please amend paragraph [0791] as follows:

[0791] pLenti4/V5-DEST, pLenti6/V5-DEST, and pLenti6/UbC/V5-DEST are C-terminal fusion vectors. To express a fusion polypeptide of a polypeptide encoded by a sequence of interest with the V5 epitope coding sequence present in the vector, a sequence of interest must contain an ATG initiation codon in the context of a Kozak translation initiation sequence for proper initiation of translation in mammalian cells (Kozak, 1987; Kozak, 1991; Kozak, 1990). An example of a Kozak consensus sequence is (G/A)NN**ATGG** (SEQ ID NO: 159). Other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold). The ATG initiation codon is underlined. The reading frame of the polypeptide encoded by the sequence of interest must be in frame with the C-terminal tag containing the V5 epitope after recombination and the sequence of interest must not contain a stop codon in this reading frame. The C-terminal peptide containing the V5 epitope and the attB2 site will add approximately 4.5 kDa to the size of the polypeptide encoded by the sequence of interest.

Please amend paragraph [0796] as follows:

[0796] Figure 46A (SEQ ID NO: 150) provides a diagram of the recombination region of pLenti6/V5-DEST<sup>TM</sup> or pLenti4/V5-DEST after a recombination reaction with a sequence of interest. Shaded regions correspond to the sequence of interest transferred from the entry clone into the pLenti6/V5-DEST<sup>TM</sup> vector by recombination. Non-shaded regions are derived from the pLenti6/V5-DEST<sup>TM</sup> or pLenti4/V5-DEST vector. Bases 2448 and 4130 of the pLenti4/V5-DEST and pLenti6/V5-DEST<sup>TM</sup> sequences are marked. Restriction sites are labeled to indicate the actual cleavage site.

Please amend paragraph [0797] as follows:

[0797] Figure 46B (SEQ ID NO: 151) shows the recombination region of the expression clone resulting from pLenti6/UbC/V5-DEST x entry clone. Note that this diagram does not contain the complete sequence of the UbC promoter. For a diagram of the UbC promoter see Figures 46C and 46D (SEQ ID NO: 136). Shaded regions in Figure 46B correspond to those DNA sequences transferred from the entry clone into the pLenti6/UbC/V5-DEST vector by recombination. Non-shaded regions are derived from the pLenti6/UbC/V5-DEST vector. Bases 3079 and 4762 of the pLenti6/UbC/V5-DEST sequence are marked.



Please amend paragraph [0799] as follows:

[0799] To confirm that a gene of interest is in frame with the C-terminal tag, sequence the expression construct, if desired. Refer to Figure 46 for the location of the recommended primer binding sites (CMV or UbC forward priming site and V5(C-term) reverse priming site) to use to sequence the expression construct. To sequence a pLenti4/V5-DEST or pLenti6/V5-DEST construct, the CMV forward primer 5'-CGCAAATGGGCGGTAGGCGTG-3' (SEQ ID NO: 66) and V5(C-term) reverse primer 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 67) can be used. To sequence a pLenti6/UbC/V5-DEST construct, the UB forward primer 5'-TCAGTGTTAGACTAGTAAATTG-3' (SEQ ID NO: 68) and the V5(C-term) reverse primer 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 69) can be used.

Please amend paragraph [0802] as follows:

[0802] The pLenti6/V5-DEST<sup>™</sup> vector (8688 bp, SEQ ID NO: 105) contains the following features at the indicated locations. The locations of the features in the pLenti6/V5-DEST plasmid are as follows: RSV/5' LTR hybrid promoter bases 1-410; RSV promoter bases 1-229; HIV-1 5' LTR bases 230-410; 5' splice donor base 520; HIV-1 psi ( $\psi$ ) packaging signal bases 521-565; HIV-1 Rev response element (RRE) bases 1075-1308; 3' splice acceptor base 1656; 3' splice acceptor base 1684; CMV promoter bases 1809-2392; *attR1* site: bases 2440-2564; Chloramphenicol resistance gene (*Cm<sup>R</sup>*) bases 2673-3332; *ccdB* gene bases 3674-3979; *attR2* site bases 4020-4144; V5 epitope bases 4197-4238; SV40 early promoter and origin bases 4293-4602; EM7 promoter bases 4657-4723; Blasticidin resistance gene bases 4724-5122;  $\Delta$ U3/3' LTR bases 5208-5442;  $\Delta$ U3 bases 5208-5261; 3' LTR: bases 5262-5442; SV40 polyadenylation signal bases 5514-5645; *bla* promoter bases 6504-6602; Ampicillin (*bla*) resistance gene bases 6603-7463; and pUC origin bases 7608-8281.

Please amend paragraph [0803] as follows:

[0803] The pLenti4/V5-DEST vector(8634 nucleotides, SEQ ID NO: 107) contains the following features at the indicated locations: RSV/5' LTR hybrid promoter bases 1-410; RSV promoter bases 1-229; HIV-1 5' LTR bases 230-410; 5' splice donor base 520; HIV-1 psi ( $\psi$ ) packaging signal bases 521-565; HIV-1 Rev response element (RRE) bases 1075-1308; 3' splice acceptor base 1656; 3' splice acceptor base 1684; CMV promoter bases 1809-2392; *attR1* site bases 2440-2564; Chloramphenicol resistance gene ( $\text{Cm}^R$ ) bases 2673-3332; *ccdB* gene bases 3674-3979; *attR2* site bases 4020-4144; V5 epitope bases 4197-4238; SV40 early promoter and origin bases 4293-4602; EM7 promoter bases 4621-4687; Zeocin™ resistance gene bases 4688-5062;  $\Delta\text{U3}/3'$  LTR bases 5154-5388;  $\Delta\text{U3}$  bases 5154-5207; 3' LTR bases 5208-5388; SV40 polyadenylation signal bases 5460-5591; *bla* promoter bases 6450-6548; Ampicillin (*bla*) resistance gene bases 6549-7409; and the pUC origin bases 7554-8227.

Please amend paragraph [0804] as follows:

[0804] The pLenti6/UbC/V5-DEST vector (9320 nucleotides, SEQ ID NO: 108) contains the following features at the indicated locations: RSV/5' LTR hybrid promoter bases 1-410; RSV promoter bases 1-229; HIV-1 5' LTR bases 230-410; 5' splice donor base 520; HIV-1 psi ( $\psi$ ) packaging signal bases 521-565; HIV-1 Rev response element (RRE) bases 1075-1308; 3' splice acceptor base 1656; 3' splice acceptor base 1684; UbC promoter bases 1798-3016; *attR1* site bases 3072-3196; Chloramphenicol resistance gene ( $\text{Cm}^R$ ) bases 3305-3964; *ccdB* gene bases 4306-4611; *attR2* site bases 4652-4776; V5 epitope bases 4829-4870; SV40 early promoter and origin bases 4925-5234; EM7 promoter bases 5289-5355; Blasticidin resistance gene bases 5356-5754;  $\Delta\text{U3}/3'$  LTR bases 5840-6074;  $\Delta\text{U3}$  bases 5840-5893; 3' LTR bases 5894-6074; SV40 polyadenylation signal bases 6146-6277; *bla* promoter bases 7136-7234; Ampicillin (*bla*) resistance gene bases 7235-8095; and the pUC origin bases 8240-8913.

Please amend paragraph [0805] as follows:

[0805] The following protocol may be used to clone a nucleic acid segment using topoisomerase. Other protocols known to those skilled in the art are also suitable. An example of another suitable protocol may be found in the pENTR Directional TOPO® Cloning Kit manual available from Invitrogen Corporation, Carlsbad, CA (catalog number 25-0434).

Step	Action
Design PCR Primers	Include the 4 base pair sequences (CACC, <u>SEQ ID NO: 163</u> ) necessary for directional cloning on the 5' end of the forward primer. Design the primers such that a gene of interest will be optimally expressed and fused in frame with the V5 epitope tag, if desired.

Please amend paragraph [0809] as follows:

[0809] The sequences of CMV Forward and V5(C-term) Reverse sequencing primers. Two micrograms of each primer are as follows:

CMV Forward 5'-CGCAAATGGGCGGTAGGCGTG-3' (SEQ ID NO: 66)

V5(C-term) Reverse 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 67)

Please amend paragraph [0819] as follows:

[0819] In this system, PCR products are directionally cloned by adding four bases to the forward primer (CACC, SEQ ID NO: 163). The overhang in the cloning vector (GTGG, SEQ ID NO: 164) invades the 5' end of the PCR product, anneals to the added bases, and stabilizes the PCR product in the correct orientation. Inserts can be cloned in the correct orientation with efficiencies equal to or greater than 90%. A schematic representation of the process is shown in Figure 47 (SEQ ID NO: 137).

Please amend paragraph [0821] as follows:

[0821] When designing a forward PCR primer, consider the points below. Refer to Figure 48 (SEQ ID NO: 138) for a diagram of the TOPO<sup>®</sup> Cloning site for pLenti6/V5-D-TOPO<sup>®</sup>.

Please amend paragraph [0822] as follows:

[0822] To enable directional cloning, the forward PCR primer **MUST** contain the sequence, CACC (SEQ ID NO: 163), at the 5' end of the primer. The 4 nucleotides, CACC (SEQ ID NO: 163), base pair with the overhang sequence, GTGG (SEQ ID NO: 164), in the pLenti6/V5-D-TOPO<sup>®</sup> vector.

Please amend paragraph [0823] as follows:

- [0823] The sequence of interest should include a Kozak translation initiation sequence with an ATG initiation codon for proper initiation of translation (Kozak, 1987; Kozak, 1991; Kozak, 1990). An example of a Kozak consensus sequence is (G/A)NNATGG (SEQ ID NO: 159). Other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold). The ATG initiation codon is underlined.

Please amend paragraph [0824] as follows:

- [0824] Below is the DNA sequence of the N-terminus of a theoretical protein and the proposed sequence for a forward PCR primer. The ATG initiation codon is underlined.

DNA sequence: 5'-ATG GGA TCT GAT AAA (SEQ ID NO: 69)

Proposed Forward PCR primer: 5'-C ACC ATG GGA TCT GAT AAA (SEQ ID NO: 70)

If the forward PCR primer is designed as above, then the primer includes the 4 nucleotides, CACC (SEQ ID NO: 163), required for directional cloning, and the ATG initiation codon falls within the context of a Kozak sequence (see boxed sequence), allowing proper translation initiation of the PCR product in mammalian cells. The first three base pairs of the PCR product following the 5' CACC (SEQ ID NO: 163) overhang will constitute a functional codon.

Please amend paragraph [0825] as follows:

- [0825] When designing a reverse PCR primer, consider the points below. Refer to Figure 48 (SEQ ID NO: 152) for a diagram of the TOPO<sup>®</sup> Cloning site for pLenti6/V5-D-TOPO<sup>®</sup>. To ensure that the PCR product clones directionally with high efficiency, the reverse PCR primer should not be complementary to the overhang sequence GTGG (SEQ ID NO: 164) at the 5' end. A one base pair mismatch can reduce the directional cloning efficiency from 90% to 50%, increasing the likelihood of the PCR product cloning in the opposite orientation (see below). Evidence of PCR products cloning in the opposite orientation from a two base pair mismatch has not been observed.

Please amend paragraph [0827] as follows:

[0827] First Example of Reverse Primer Design. Below is the sequence of the C-terminus of a theoretical protein. The stop codon is underlined.

DNA sequence: AAG TCG GAG CAC TCG ACG ACG GTG TAG-3' (SEQ ID NO: 71)

Please amend paragraph [0828] as follows:

[0828] To fuse the protein in frame with the C-terminal tag in pLenti6/V5-D-TOPO<sup>®</sup>, design the reverse PCR primer to start with the codon just up-stream of the stop codon, but the last two codons contain GTGG (SEQ ID NO: 164, underlined below), which is identical to the 4 bp overhang sequence. As a result, the reverse primer will be complementary to the 4 bp overhang sequence, increasing the probability that the PCR product will clone in the opposite orientation. This situation should be avoided.

DNA sequence: AAG TCG GAG CAC TCG ACG ACG GTG TAG-3' (SEQ ID NO: 71)

Proposed Reverse PCR primer sequence: TG AGC TGC TGC CAC AAA-5' (SEQ ID NO: 160)

Please amend paragraph [0831] as follows:

[0831] Below is the sequence for the C-terminus of a theoretical protein. The stop codon is underlined.

...GCG GTT AAG TCG GAG CAC TCG ACG ACT GCA TAG-3' (SEQ ID NO: 73)

Please amend paragraph [0832] as follows:

[0832] To fuse the ORF in frame with the C-terminal tag in pLenti6/V5-D-TOPO<sup>®</sup>, remove the stop codon by starting with nucleotides homologous to the last codon (TGC) and continue upstream. The reverse primer will be:

5'-TGC AGT CGT CGA GTG CTC CGA CTT-3' (SEQ ID NO: 74)

Please amend paragraph [0833] as follows:

- [0833] This will amplify the C-terminus without the stop codon and allow the ORF to be joined in frame with the C-terminal tag. To avoid joining the ORF in frame with a C-terminal tag, design the reverse primer to include the stop codon.

5'-CTA TGC AGT CGT CGA GTG CTC CGA CTT-3' (SEQ ID NO: 75)

Please amend paragraph [0834] as follows:

- [0834] pLenti6/V5-D-TOPO<sup>®</sup> accepts blunt-end PCR products. Do not add 5' phosphates to primers for PCR. This will prevent ligation into the pLenti6/V5-D-TOPO<sup>®</sup> vector. It is recommended that oligonucleotides be gel-purified, especially if they are long (> 30 nucleotides). Note that pLenti6/V5-D-TOPO<sup>®</sup> is supplied linearized with both ends adapted with topoisomerase I (see Figure 47, SEQ ID NO: 137). The sequence of pLenti6/V5-D-TOPO<sup>™</sup> is provided as Table 18 (SEQ ID NO: 106).

Please amend paragraph [0852] as follows:

- [0852] The sequence for pLenti6/V5-D-TOPO<sup>®</sup> shown in Table 18 (SEQ ID NO: 106) includes the overhang sequence (GTGG, SEQ ID NO: 164) hybridized to CACC (SEQ ID NO: 163).

Please amend paragraph [0891] as follows:

- [0891] Vector construction. (a) pUC12-tRNA<sup>TAG</sup> : Three suppressor tRNA vectors were received from Dr. Uttam RajBhandary of Massachusetts Institute of Technology. Each suppressor tRNA vector, designated pUCtS Su+ amber, opal, and ochre, is identical except for the stop anticodon (Capone *et. al.* 1985, *EMBO*, 4(1):213-221). For convenience, the pUCtS Su+ amber vector is now referred to as pUC12-tRNA<sup>TAG</sup>. To create a tetracycline-regulated version, referred to herein as pUC12-TO-tRNA<sup>TAG</sup>, two tetracycline operators (tetO<sub>2</sub>) were cloned into the *SnaBI* site in pUC12-tRNA<sup>TAG</sup> using the following annealed oligonucleotides:

tetO<sub>2</sub> Forward primer

5' GACTCGAGTCTCCCTATCAGTGATAGAGATCTCGAGGTC 3' (SEQ ID NO: 76) and

tetO<sub>2</sub> Reverse primer

5' GACCTCGAGATCTCTATCACTGATAGGGAGACTCGAGTC 3' (SEQ ID NO: 77).

In italics is a unique *BglII* site that was introduced with the oligonucleotide. The underlined sequences are *XhoI* sites. All tRNA constructs were sequence verified.

(b) pcDNA6.2/GFP-DEST: pcDNA6.2/V5-DEST was digested with *Apal* and *PmeI* to remove the V5 tag. pcDNA3.1/lacZ-stop<sup>TAG</sup>-GFP was also digested with *Apal* and *PmeI* to isolate the GFP fragment. The GFP fusion tag was ligated to the pcDNA6.2 DEST vector (Invitrogen Corporation, Carlsbad, CA catalog # 12489-027) and transformed into DB3.1 cells. Colonies were grown on LB-Amp plates. A clone was selected that resulted in correct band fragments when digested with *NdeI* and then sequence confirmed.

(c) pENTR CAT<sup>TAA, TAG, TGA</sup> The GATEWAY™ CAT entry clones were PCR amplified followed by TOPO cloning (Invitrogen Corporation, Carlsbad, CA product manual #25-0434) into pENTR dT. Information for both vectors may be obtained by contacting Invitrogen Corporation, Carlsbad, CA. The primer sequences used were

Forward primer: 5' CACCATGGAGAAAAAATCACTGG 3' (SEQ ID NO: 78)

Reverse primer: 5' CTGCTACGCCCCGCCCTGC 3' (SEQ ID NO: 79).

The underlined sequence varied depending on which stop codon was required. Plasmid constructs were sequence verified.

(d) pcDNA3.2/V5-GW/CAT<sup>TAA, TAG, TGA</sup> : pcDNA3.2/V5-DEST and pENTR CAT with each of the stops was recombined using LR clonase to generate the plasmids pcDNA3.2/V5-GW/CAT<sup>TAA, TAG, TGA</sup>. Clones were identified as correct by restriction enzyme digests and sequence confirmed.

(e) pcDNA6.2/GFP-GW/CAT<sup>TAA, TAG, TGA</sup> : pcDNA6.2/GFP-DEST and pENTR CAT with each of the stops was recombined using LR clonase to generate the plasmids pcDNA6.2/GFP-GW/CAT<sup>TAA, TAG, TGA</sup>. Clones were identified as correct by restriction enzyme digests and sequence confirmed.

(f) pENTR p48<sup>TAG</sup> : This GATEWAY™ Entry clone was obtained from the Ultimate™ ORFeome Collection (Invitrogen Corporation, Carlsbad, CA) and is referred to by several names: HS8-E6 (internal Invitrogen designation), BC000141 (GenBank Accession number), or ORF 12 (used for convenience). This ORF is referred to as p48 and is a human c-myc variant (see Results section). Information for this clone may be obtained by contacting Invitrogen Corporation, Carlsbad, CA or GenBank.

(g) pcDNA6.2/GFP-GW/p48<sup>TAG</sup> : pcDNA6.2/GFP-DEST and pENTR p48<sup>TAG</sup> were recombined with LR clonase to generate pcDNA6.2/GFP-GW/p48<sup>TAG</sup>. The recombination

reaction was transformed into TOP10 cells (Invitrogen Corporation, Carlsbad, CA, catalog #C4040-10) and plated on LB Ampicillin plates. Colonies were picked and clones were identified as correct by restriction enzyme digests and functional suppression.

(h) pcDNA6.2/V5-GW/p48<sup>TAG</sup> : pcDNA6.2/V5-DEST and pENTR p48<sup>TAG</sup> were recombined with LR clonase to generate the plasmid pcDNA6.2/V5-GW/p48<sup>TAG</sup>. The recombination reaction was transformed into TOP10 cells and plated on LB Ampicillin plates. Colonies were picked and clones were identified as correct by restriction enzyme digests and functional suppression.

(i) pENTR-TO-tRNA<sup>TAG</sup> : pENTR1A (Invitrogen Corporation, Carlsbad, CA) and pUC12-TO-tRNA<sup>TAG</sup> (described in (a) above) were digested with *Sall* and *EcoRI*. Following digests, the appropriate bands were gel purified and ligated. Ligations were transformed into TOP10 cells and plated on LB-Kanamycin plates. Clone 1 was selected following *Sall* and *EcoRI* diagnostic digests.

(j) pENTR-tRNA<sup>TAG</sup> : Primers were created to PCR amplify the tRNA gene from pUC12 TO tRNA<sup>TAG</sup> with *EcoRI* and *XbaI* sequences at the 5' end, and *SpeI* and *HindIII* at the 3' end. The primer sequences were:

Forward primer:

5' CACCGAATTCTCTAGAGATGTCTGTGAAAAGAAACAT 3' (SEQ ID NO: 80) and

Reverse primer:

5' ATATAAGCTTACTAGTCCGGATTCCTCTACCCGAGA 3' (SEQ ID NO: 81).

The tRNA PCR product was gel purified, TOPO cloned into pENTR dT, and transformed into TOP10 cells. Colonies were selected on LB Kanamycin plates. Upon confirmation of proper insertion, two separate digests were conducted. The first digest with *EcoRI* and *XbaI* opened the pENTR-tRNA<sup>TAG</sup>. The second digest with *EcoRI* and *SpeI* excised the tRNA gene. Correct fragments were gel purified, the two fragments were ligated, as *XbaI* and *SpeI* have complimentary ends, thus creating a dimer of tRNA. With confirmation of proper insertion, the same two previous digests were repeated with the dimer plasmid, fragments gel purified, ligations performed creating a tetramer. A final two digests, as previously described, were repeated on the tetramer, fragments gel purified, ligations performed creating an octamer tRNA in the pENTR backbone. (Buvoli *et al.*, *Mol. Cell. Biol.* 20:3116-3124 (2000), Suppression of Nonsense Mutations in Cell Culture and Mice by Multimerized Suppressor tRNA Genes).



Please amend paragraph [0892] as follows:

[0892] Adenovirus carrying the suppressor tRNA<sup>TAG</sup> was created using a GATEWAY™ LxR reaction. pAd/PL-DEST vector (Table 10 (SEQ ID NO: 87), Figure 9) was recombined with either pENTR-tRNA<sup>TAG</sup> or pENTR-tRNA<sup>8TAG</sup> to create pAd-tRNA<sup>TAG</sup> (Table 8, SEQ ID NO: 85) or pAd-tRNA<sup>8TAG</sup> expression vectors, respectively. These vectors were subsequently cut with *PacI* and transfected into TReX 293 (Invitrogen Corporation, Carlsbad, CA, catalog #R710-07) cells to produce the initial stocks of recombinant adenovirus. Subsequent virus amplification and titering was performed in 293A cells as previously described in Example 4.

Please amend paragraph [0909] as follows:

[0909] The tRNA<sup>TAG</sup> gene was cloned into pENTR to create pENTR-tRNA<sup>TAG</sup>, and this was used in a GATEWAY™ LR reaction with pAd/PL-DEST (Table 10 (SEQ ID NO: 87), Figure 9) to create pAd-tRNA<sup>TAG</sup>. Several large-scale preparations of virus were performed and functional testing was done. Adenovirus proved to be a very efficient way of delivering the tRNA, however preliminary experiments required MOIs (multiplicity of infection) of several hundred to deliver biologically relevant amounts of the tRNA. The goal was to achieve at least 50% suppression using an MOI of 50 in COS cells transfected with one of the reporter genes. It is believed that the tRNAs must compete with endogenous protein "stop factors" occupying the stop codon, which may explain the more efficient suppression in the presence of multiple copies of the nucleic acid molecule encoding the suppressor tRNA sequence. In an attempt to reduce the number of viral particles required for efficient suppression, eight copies of the tRNA gene were cloned into pENTR (called pENTR-tRNA<sup>8TAG</sup>) and recombined into the adenovirus promoterless Destination vector. This new adenovirus (Adeno-tRNA<sup>8TAG</sup>) was compared with the original monomer virus (Adeno-tRNA<sup>TAG</sup>) for stop suppression (Figure 53). As shown by both fluorescent microscopy (upper panels) and anti-β-galactosidase western blotting (lower panel), a modest increase in suppression efficiency was observed with the 8-mer tRNA, and these suppression levels are as good as those seen with the plasmid-based tRNA (lanes 2 and 4). Indeed, in all subsequent experiments, the Ad-tRNA<sup>8TAG</sup> transduction performed as well or better than a pUC-tRNA<sup>TAG</sup> plasmid transfection making this recombinant adenovirus configuration particularly suitable for the methods of this invention.

Please amend paragraph [0927] as follows:

[0927] The pcDNA<sup>TM</sup>6.2/V5-DEST and pcDNA<sup>TM</sup>6.2/GFP-DEST vectors enable expression of recombinant polypeptide containing a choice of C-terminal tags. The pcDNA<sup>TM</sup>6.2/V5-DEST vector encodes the V5 epitope for detection of recombinant polypeptide using the Anti-V5 antibodies. A plasmid map is provided as Figure 57 and the sequence of this vector is provided as Table 28 (SEQ ID NO: 112). The pcDNA<sup>TM</sup>6.2/GFP-DEST vector encodes the Cycle-3 GFP for fusion to a polypeptide sequence of interest and use as a reporter gene. A plasmid map of this vector is provided as Figure 58 and the sequence of this vector is provided as Table 29 (SEQ ID NO: 113).

Please amend paragraph [0929] as follows:

[0929] The location in the plasmid sequence of pcDNA<sup>TM</sup>6.2/V5-DEST (7341 nucleotides, SEQ ID NO: 112) of the features discussed above are: CMV promoter bases 232-819; T7 promoter/priming site bases 863-882; *attR1* site bases 911-1035; *ccdB* gene bases 1464-1769 (c); chloramphenicol resistance gene bases 2111-2770 (c); *attR2* site bases 3051-3175; V5 epitope bases 3201-3242; V5 reverse priming site 3210-3230; TK polyadenylation signal bases 3269-3540; *f1* origin 3576-4004; SV40 early promoter and origin 4031-4339; EM7 promoter bases 4394-4460; Blasticidin resistance gene bases 4461-4859; SV40 early polyadenylation signal bases 5017-5147; pUC origin bases 5530-6200 (c); Ampicillin (*bla*) resistance gene bases 6345-7205 (c); *bla* promoter bases 7206-7304 (c) where (c) indicates present on the complementary strand.

Please amend paragraph [0930] as follows:

[0930] The location in the plasmid sequence of pcDNA<sup>TM</sup>6.2/GFP-DEST (7995 nucleotides, SEQ ID NO: 113) of the features discussed above are: CMV promoter bases 232-819; T7 promoter/priming site bases 863-882; *attR1* site bases 911-1035; *ccdB* gene bases 1464-1769 (c); Chloramphenicol resistance gene bases 2111-2770 (c); *attR2* site bases 3051-3175; Cycle-3 GFP bases 3195-3908; GFP reverse priming site 3303-3324; TK polyadenylation signal bases 3923-4194; *f1* origin 4230-4658; SV40 early promoter and origin 4685-4993; EM7 promoter bases 5048-5114; Blasticidin resistance gene bases 5115-5513; SV40 early polyadenylation signal bases 5671-5801; pUC origin bases 6184-6854 (c); Ampicillin (*bla*) resistance gene bases

6999-7859 (c); *bla* promoter bases 7860-7958 (c), where (c) indicates the feature is present on the complementary strand.

Please amend paragraph [0939] as follows:

[0939] The recombination region of pcDNA<sup>TM</sup>6.2/V5-DEST and pcDNA6.2/GFP-DEST are provided as Figures 61A (SEQ ID NO: 153) and 61B (SEQ ID NO: 154) respectively. In Figure 61A (SEQ ID NO: 153), shaded regions correspond to those DNA sequences transferred from the entry clone into the pcDNA<sup>TM</sup>6.2/V5-DEST vector by recombination. Non-shaded regions are derived from the pcDNA<sup>TM</sup>6.2/V5-DEST vector. The sequences encoded by the gene of interest are boxed. To facilitate use with the Tag-on-Demand<sup>TM</sup> System, a gene of interest must contain a TAG stop codon and be in-frame with the C-terminal tag. Bases 918 and 3161 of the pcDNA<sup>TM</sup>6.2/V5-DEST sequence are marked. Note that TAA and TGA stop codons are included downstream of the V5 epitope to allow translation termination in the Tag-on-Demand<sup>TM</sup> System. In Figure 61B (SEQ ID NO: 154), the recombination region of the expression clone resulting from pcDNA<sup>TM</sup>6.2/GFP-DEST x entry clone is shown. The shaded regions correspond to those DNA sequences transferred from the entry clone into the pcDNA<sup>TM</sup>6.2/GFP-DEST vector by recombination. Non-shaded regions are derived from the pcDNA<sup>TM</sup>6.2/GFP-DEST vector. The sequences encoded by the gene of interest are boxed. To facilitate use with the Tag-on-Demand<sup>TM</sup> System, the gene of interest should contain a TAG stop codon. Bases 918 and 3161 of the pcDNA<sup>TM</sup>6.2/GFP-DEST sequence are marked. TAA and TGA stop codons are included downstream of the GFP gene to allow translation termination in the Tag-on-Demand<sup>TM</sup> System (not shown).

Please amend paragraph [0951] as follows:

[0951] To confirm that a gene of interest is in the correct orientation and in frame with the C-terminal fusion tag, the expression construct can be sequenced. The following primers can be used to sequence an expression construct. Figures 61A (SEQ ID NO: 153) and 61B (SEQ ID NO: 154) provide the location of the primer binding sites in each vector. For sequencing the pcDNA<sup>TM</sup>6.2/V5-DEST vector, an oligonucleotide that binds to the T7 promoter/priming site (*e.g.*, 5'-TAATACGACTCACTATAGGG-3' SEQ ID NO: 45) and an oligonucleotide that binds to the V5(C-term) reverse priming site (*e.g.*, 5'-ACCGAGGAGAGGGTTAGGGAT-3' SEQ ID

NO: 46) can be used. To sequence the pcDNA™6.2/GFP-DEST vector, an oligonucleotide that binds to the T7 promoter/priming site (*e.g.*, 5'-TAATACGACTCACTATAGGG-3' SEQ ID NO: 45) and an oligonucleotide that binds to the GFP reverse priming site (*e.g.*, 5'-GGGTAAGCTTTCCGTATGTAGC-3' SEQ ID NO: 82) can be used.

Please amend paragraph [1002] as follows:

[1002] In some embodiments, methods of the invention may be used to create a nucleic acid molecule encoding a fusion polypeptide. According to one aspect of the invention, a nucleic acid molecule encoding a fusion polypeptide may be constructed by combining a first nucleic acid molecule having a first nucleic acid sequence encoding a polypeptide sequence (*e.g.*, a polypeptide of interest) with a second nucleic acid molecule having a second nucleic acid sequence encoding an additional polypeptide sequence (*e.g.*, a polypeptide tag sequence). A nucleic acid molecule encoding a polypeptide of interest should contain an ATG initiation codon in the context of a Kozak consensus sequence for proper initiation of translation in mammalian cells (Kozak, 1987; Kozak, 1991; Kozak, 1990). An example of a Kozak consensus sequence is (G/A)NN**ATGG** (SEQ ID NO: 159), where the ATG initiation codon is underlined. Other sequences are possible, but the G or A at position -3 and G at position +4 are the most critical for function (shown in bold).

Please amend paragraph [1075] as follows:

[1075] In one particular embodiment, the present invention provides two nucleic acid molecules (*e.g.*, plasmids, viral vectors etc.) that may be used in the practice of the invention. A first nucleic acid molecule comprises a repressor sequence and a promoter and may comprise a sequence of interest operably linked to the repressor and promoter. A first nucleic acid molecule may also comprise one or more recognition sequences (*e.g.*, recombination sites, topoisomerase sites, restriction enzyme sites, etc.). One non-limiting example of a first nucleic acid molecule is the plasmid, pLenti4/TO/V5-DEST, which contains two copies of the tetracycline operator sequence (TO) within the CMV promoter (CMVTetO<sub>2</sub>). A map of this vector is provided as Figure 70A and the nucleotide sequence is provided in Table 31 (SEQ ID NO: 115). This plasmid also contains two recombination sites that do not recombine with each other. A sequence of interest may be operably linked to the promoter and repressor using any technique

known in the art. In one embodiment, a sequence of interest may be operably linked to the promoter and repressor by conducting a recombination reaction between a sequence of interest flanked by recombination sites and the nucleic acid molecule of the invention. For example, pLenti4/TO/V5-DEST (Figure 70A) can be reacted with a sequence of interest flanked by *attR1* and *attR2* sites to operably link the sequence of interest to the CMV promoter and tetracycline operator in a LR-recombination reaction. The reaction places the sequence of interest downstream of CMVTetO<sub>2</sub> for regulated expression in the presence of the tetracycline repressor protein.

Please amend paragraph [1076] as follows:

A second nucleic acid molecule of the invention may express one or more proteins that interact with repressor sequences. One non-limiting example of a repressor protein is the tetracycline repressor protein (TetR). One example of a suitable second nucleic acid molecule is the repressor plasmid pLenti6/TR, which expresses TetR. A map of this vector is provided as Figure 69 and the nucleotide sequence is provided as Table 32 (SEQ ID NO: 116). TetR binds the tetracycline operator sites in CMVTetO<sub>2</sub> promoter on the expression vector and blocks transcription from the promoter in the absence of inducer. When tetracycline inducer binds TetR, however, the latter dissociates from the promoter and transcription proceeds.

Please amend paragraph [1082] as follows:

[1082] A nucleic acid molecule expressing the tetracycline repressor protein may be constructed using any technique known in the art. For example, a nucleic acid fragment containing the tetracycline repressor coding sequence can be cloned using any technique known in the art. The nucleotide sequence of a nucleic acid fragment containing the coding sequence for the tetracycline repressor is provided as Table 35 (SEQ ID NO: 119). The 1.4 kb fragment also contains the  $\beta$ -globin intron. The 1.4 kb TetR-containing fragment was cloned into pLenti6/V5 (Invitrogen Corporation, Carlsbad, CA). A map of pLenti6/V5 is provided as Figure 71 and the nucleotide sequence is provided as Table 33 (SEQ ID NO: 117). The resulting plasmid, pLenti6/TR, was verified by restriction digest and sequence analyses. A map of pLenti6/TR is shown in Figure 69. pLenti6/TR can be used to generate blasticidin resistant mammalian cells that stably express the tetracycline repressor, TetR.

Please amend paragraph [1083] as follows:

**[1083]** Nucleic acid molecules comprising a promoter sequence and a repressor sequence can be constructed using any techniques known in the art. For example, pLenti4/TO/V5-DEST was created from pLenti3/V5-TREx (Invitrogen Corporation, Carlsbad, CA), by replacing the neomycin resistance gene of the latter with the zeocin resistance gene. pLenti3/V5-TREx contains the CMV promoter and Tet operators of pT-REx-DEST30 (Invitrogen Corporation, Carlsbad, CA catalog no. 12301016). A map of pLenti3/V5-TREx is provided as Figure 72 and the nucleotide sequence is provided in Table 34 (SEQ ID NO: 118).

Please amend paragraph [1104] as follows:

**[1104]** The restriction enzyme sites may be located such that a 3'-overhang of a desired length is produced on the strand containing the topoisomerase cleavage site (after the 3'-T in Fig. 73). The location of the topoisomerase cleavage site may be varied with respect to 3'-most nucleotide of the strand containing the cleavage site. This may be useful in generating a 5'-overhang on the opposite strand after topoisomerase cleavage in order to generate a sequence that can invade a double-stranded insert (see Figure 47, SEQ ID NO: 137).

Please amend Table 6 on pages 344-353 as follows:

Table 6: Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

catcatcaataataacctaatttttgattgaagccaatatgataatgagggggtggagtttgacgtggcgcgggggcgtgggaacggggc  
gggtgacgtagtagtggtggcgaagtgtgatgttgaagtgtggcgaacacatgtaagcgacggatgtggcaaaagtacgttttgggtg  
tgcgccggtgtacacaggaagtacaatttcgcgcggttttagcggtatgttagtaaatgggcgtaaccgagtaagattggccatttt  
cgcgggaaaactgaataagaggaagtgaatctgaataatttgtgtactcatagcgcgtaaatattgtctagggccgcggggactttgacc  
gtttacgtggagactcggcaggtgttttctcaggtgtttccgcgtccgggtcaaatgtggcgtttattattatagtcagtcgaagcttggat  
ccggtacctctagaattctcgaaggccgctagcgacatcggaatctccgatccctatggtcgactctcagtaaatctgctctgatccgc  
atagtaagccagtagtctgctccctgcttgtgttggaggtcgtgtagtagtgcgcgagcaaaatttaagctacaacaaggcaaggcttgac  
cgacaattgcatgaagaatctgcttaggggttaggcgttttgcgtgcttcgcgatgtacgggccagataacgcgttgacattgatttact  
agttattaatagtaatacaattacggggtcattagtctcatagcccatatatggagtccgcgttacataacttacggtaaatggccgcctggctg  
accgccaacgacccccgccattgacgtcaataatgacgtatgttccatagtaacgccaatagggactttccattgacgtcaatgggtgg  
actatttacggtaactgccacttggcagtagcatcaagtgtatcatatgccaagtacggccctattgacgtcaatgacggtaaatggccgc  
cctggcattatgccagtagcatgacctatgggactttcctacttggcagtagcatctacgtattagtcacgctattaccatggtgatgcggtttg  
gcagtagcatcaatggcggtgtagcgggtttagctacggggatttccaagctccacccattgacgtcaatgggagtttggcaccac  
aaataacgggactttccaaatgtcgtacaactccggccattgacgcaaatggcggttaggcgtgtacggtgggaaggctatataagc  
agagctctctgctaactagagaacccactgcttactggcttaccgaaattaatacgaactcactataggagacccaagctggctagtaagc  
tatcaacaagttgtacaaaaagctgaacgagaaacgtaaatgatataaatatcaataatattaaattagatttgcataaaaaacagactaca  
taactgtaaaaacacacatatccagtcactatgaataactacttagatggtattagtacgttagtcgaccgacagccttccaaatgttctt  
cgggtgatgctgccaacttagtcgaccgacagccttccaaatgttcttcaaacggaatcgtcgtatccagcctactcgtattgtctcaat  
gccgtattaaatcataaaaagaataagaaaaagaggtgcgagcctctttttgtgtgacaaaataaaacatctactatcatatacgttagt  
gtcatagtcctgaaatcatctgcatcaagaacaatttcacaactcttatacttttcttacaagtcgttcggcttcatctggattttcagcctctat  
acttactaaacgtgataaagtttctgtaatttctactgtatcgacctgcagactggctgtgtataaggagcctgacatttatattcccagaaca  
tcaggtaaatggcggttttgatgtcattttcgcgggtggtgagatcagccacttcttccccgataacggagaccggcacactggccatcgggt  
gggtcatcatgcgccagctttcatccccgatatgcaccaccgggtaaagttcacgggagactttatctgacagcagacgtgactggccagg  
gggatcaccatccgtcgccggggtggtcaataatcatctgtacatccacaaacagacgataacggctctctctttataggtgtaaacct  
taaactgcatttcaccagtcctgttctcgtcagcaaaagagccgttcatttcaataaaccggcgacctcagccatcccttctgattttccgc  
ttccagcgttcggcacgcagacgacgggcttcattctgcatggttgtgttaccagaccggagatattgacatcatatatgccttgagcaact  
gatagctgtcgtgtcaactgtcactgtaatacgtgcttcatagcacacctctttttgacatacttcgggtatacatatcagtatattcttatac  
cgcaaaaatcagcgcgcaaatatgcatactgttatctggcttttagtaagccggatccacgcgattacggcccgccctgccactcatcgag  
tactgttgaattcattagcattctgccgacatggaagccatcacagacggcatgatgaacctgaatcgccagcggcatcagcaccttctgc  
ccttgcgtataatatttgcccatggtgaaaacggggggaagaagttgtccatattggccacgtttaaataaaactggtgaaactcaccag  
ggattggctgagacgaaaaacatattctcaataaaccttttagggaaataggccaggtttaccgtaacacgccacatcttgcgaatatatgt  
gtagaaactgccggaatcgtcgtgtattcactccagagcgatgaaaacgtttcagtttgcctatggaaaacgggtgaacaagggtgaaca  
ctatcccatatcaccagctcaccgtctttcattgccataggaattccggatgagcattcatcaggcgggcaagaatgtgaataaaggccgg  
ataaaactgtgcttatttttcttacgggtcttttaaaaggccgtaatatccagctgaacggctgtggttatagggtacattgagcaactgactgaaat  
gcctcaaaatgttctttacgatgccattgggatatatcaacgggtgtatatccagtgatttttctccatttagcttcttagctcctgaaaatctc  
gataactcaaaaatacggccgtagtgatcttatttctattggtgaaagttggaacctttacgtgccgatcaacgtctcattttcgccaaaa  
gttggccagggcttccgggtatcaacagggacaccaggttatttattctgcgaagtgtcttccgtcacaggtatttttcggcgcaagt  
gcgtcgggtgatgtgccaacttagtcgactacaggtcactaataaccatcaagtagtgatttcatagtgactggatatgtgtgtttacagtat  
tatgtagctgttttttatgcaaaatcaatttaatatattgatatttatatcattttacgtttctcgttcagctttctgtacaaagtgttgatctagagg  
ggccgcgggtcgaaggtgaagcctatccctaaccctctcctcgggtctcgattctacgcgtaccgggttagtaatgagtttaaacgggggaggct  
aactgaaacacggaaggagacaataaccggaaggaaaccgcgctatgacggcaataaaaagacagaataaaacgcacgggtgttgggtc  
gttgttcataaacgcgggggttcgggtccagggtggcactctgtcgataccccaccgagacccattggggccaata

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

cgcccgctttctctttccccaccccccccccaagttcgggtgaaggcccagggtcgcagccaacgtcggggcggcaggccctg  
ccatagcagatccgattcgacagatcactgaaatgtgtggcggtggcctaagggtgggaaagaatatataaggtgggggtcttatgtatgtt  
gtatctgtttgcagcagccgccgcccatgagcaccactcgttgatggaagcattgtgagctcatattgacaacgcgcatgccccat  
gggcccgggggtgcgtcagaatgtgatgggtccagcattgatggcgtccccgtcctgcccgcaaacctctactaccttgacctacgagaccgt  
gtctggaacgccgttgagactgcagctccgccgccgcttcagccgctgcagccaccgcccggggattgtgactgactttgctttcctg  
agcccgttgcgaagcagtgacgttcccgttcacccgccgcgatgacaagttgacggctcttttggcacaattggattcttgacctgggaa  
cttaatgtcgtttctcagcagctgttgatctgcgccagcaggtttcgtccctgaaggcttctccctcccaatgcggtttaaataataa  
aaaaccagactctgtttggatttgatcaagcaagtgtctgtctttatttaggggttttgcgcgcgcggttagccccgggaccagcggtct  
cggtcgttgagggtcctgtgtattttccaggacgtggttaaagggtgactctggatgttcagatacatgggcataagcccgctcttggggtgg  
aggtagcaccactgcagagcttcacgtcgggggtggtgtgtgatgatccagtcgtagcaggagcgcgtgggcgtggtgcctaaaaatgt  
ctttcagtagcaagctgattgccaggggcaggcccttggtgtaagtgtttacaagcggtaagctgggatgggtgcatacgtggggatg  
agatgcacttggactgtatttttaggttggtatgttcccagccatccctccggggattcatgtgtgcagaaccaccagcacagtgtatcc  
ggtgcacttgggaaattgtcatgtagcttagaaggaaatgcgtggaagaacttggagacgccctgtgacctcaagattttccatgcattc  
gtccataatgatggcaatgggcccacgggcggcggcctgggcgaagatatttctgggatacctaactgcatagtgtgttcaggatgaga  
tcgtcataggccatttttacaagcgcggggcggagggtgccagactgcggtataatggtccatccggcccaggggcgtagttaccctcac  
agatttgacatttcccacgtttgagttcagatggggggatcatgtctacctgcggggcgatgaagaaaacggtttccggggtaggggagat  
cagctgggaagaaagcaggttctgagcagctgcgacttaccgcagccggtggggccgtaaatcacacctattaccgggtgcaactggta  
gttaagagagctgcagctgccgtcatccctgagcaggggggcccacttcgttaagcatgtccctgactcgcattgtttccctgaccaaaccg  
ccagaaggcgctcgcgccagcgatagcagttcttgaagggaagcaaatgtttcaacgggttgagaccgtccgccgtaggcattgtttg  
agcgtttgaccaagcagttccaggcggtcccacagctcgtcacctgtctacggcatctcgtatccagcatatctctctgttcgcgggttg  
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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

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Please amend Table 7 on pages 354-362 as follows:

Table 7: Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

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gatcatcatgtctgtcatgatataatgttggcacaacacaggcacacgtgcatacacttctcaggattacaagctcctcccgcttagaac  
catatcccagggaacaaccttctgaatcagcgtaaatccacactgcagggaagacctgcacgttaactcacgttgtgcattgtcaaa  
gtgttacattcgggcagcagcggatgacctccagtatggtagcgcgggtttctgtctcaaaaggaggtagacgatccctactgtacggagt  
gcgcgagacaaccgagatcgtgttggtcgtatgtcatgccaatggaacgccggacgtatgtatatttctgaagcaaaaccaggtgc  
ggcggtgacaaaacagatctgcgtctccggtctcggcgttagatcgtctgtgtagtagttgtatgtatccactctctcaagcatccaggc  
gccccctggcttgggttctatgtaaactccttcatgcgccgtgccctgataacatccaccaccgcagaataagccacaccagccaacct  
acacattcgttctgcgagtcacacacgggaggagcgggaagagctggaagaacctgttttttttttccaaaagattatccaaaacctca  
aaatgaagatctattaagtgaacgcgtccctccggtggcgtggtcaactctacagccaaagaacagataatggcatttgaagattgtg  
cacaatggcttccaaaaggcaaacggccctcacgtccaagtggacgtaaaggctaaaccttcagggtgaatcctctataaacattcca  
gcacctcaacctatgcccataatctcatctgccaccttctcaatatcttaagcaaatcccgaatattaagtccggccattgtaaaatc  
tgctccagagcgcctccaccttcagcctcaagcagcgaatcatgattgcaaaaattcaggttctcagacacctgtataagattcaaaagc  
ggaacattaacaaaataaccgcgatcccgtaggtcccttcgagggccagctgaacataatcgtgcaggctgtcacggaccagcgcggc  
cacttccccggcaggaaaccttgacaaaagaacctcactgattatgacacgcatactcgagctatgtaaccag



Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

cgtagccccgatgtaagctttgttgcattggcgggcgatataaaatgcaaggtgctgctcaaaaaatcaggcaaagcctcgcgcaaaaaag  
aaagcacatcgtagtcatgctcatgcagataaaggcaggttaagctccggaaccaccacagaaaaagacaccattttctctcaaacatgtct  
gcggttttctgcataaacacaaaaataaaatacaaaaaaacatttaaacattagaagcctgtcttacaacaggaaaaacaacccttataagca  
taagacgggactacggccatgccggcgtagaccgtaaaaaaactggtcaccgtgattaaaaagcaccaccgacagctcctcgggtcatgtccg  
gagtcataatgtaagactcggtaaacacatcaggttgattcacatcggtcagtgctaaaaagcgaccgaaatagcccgggggaatacatatc  
ccgcaggcgtagagacaacattacagccccataggaggtatacaaaaattaataggagagaaaaacataaacacctgaaaaaccct  
cctgcctaggcaaaatagcaccctcccgtccagaacaacatacagcgcttcacagcggcagccataacagtcagccttaccagtaaaa  
aagaaaaacctattaaaaaacaccactcgacacggcaccagctcaatcagtcacagtgtaaaaaagggccaaagtgcagagcgagtatata  
taggactaaaaaatgacgtaacgggttaaagtccacaaaaaacaccagaaaaaccgcacgcgaacctacgccagaaacgaaagccaaa  
aaaccacaaacttctcaaatcgtcacttccgttttccacgttacgtcacttcccatttaagaaaactacaattcccaacacatacaagttact  
ccgccctaaaacctacgtcacccgccccgttcccacgccccgcgccacgtcacaaactccacccccctcattatcatattgggttcaatccaa  
aataagggtatattattgatgattgtaatttaaatccgcacatgcagatcagagctctccgggaattcggtatctgcgacgcgaggctggatg  
gccttccccattatgattcttctcgttccggcgggcatcgggatgccgcgttgacagccatgctgtccaggcaggtagatgacgacctca  
gggacagcttcacggccagcaaaaggccaggaaccgtaaaaaggccgcgttgctggcggttttccataggctccgccccctgacgagc  
atcacaaaaatcgacgctcaagtcagaggtggcgaaaccgacaggactataagataaccaggcggttccccctggaagctccctcgtgc  
gctctcctgttccgacctgccgttaccggatacctgtccgccttctcccttcgggaagcgtggcgctttctcaatgctcacgctgtaggtat  
ctcagttcgggtgtaggtcgttcgctccaagctgggctgtgtgcacgaacccccgttcagcccagccgctgcgccttatccggtaactatcg  
tcttgagtcgaacccggaagacacgacttatcgccactggcagcagccactggttaacaggattagcagagcgaggtatgtaggcgggtgc  
tacagagttcttgaagtgggtggcctaactacggctacactagaaggacagttttggtatctgcgctctgctgaagccagttaccttcgaaa  
aagagttggtagctcttgatccggcaaacaaaccaccgctggtagcgggtggtttttgttgaagcagcagattacgcgcagaaaaaaag  
gatctcaagaagatcctttgatcttttctacggggctgacgctcagtggaacgaaaactacgttaagggttttgggtcatgagattatcaaaa  
aggatcttcacctagatccttttaaatcaatctaaagtatatatgagtaaaacttgggtctgacagttaccaatgcttaatcagtgaggcacctatctc  
agcgatctgtctatttctgtcatccatagttgcctgactccccgtcgtgtagataactacgatacgggagggccttaccatctggccccagtgct  
gcaatgataccgcgagaccacgctcaccggctccagattatcagcaataaaccagccagccgggaagggccgagcgcagaagtgggtc  
ctgcaactttatccgctccatccagcttattaattgttgcgggaagctagagtaagtagttcgccagttaatagtttgcgcaacgttggcca  
ttgntgcaggcatcgtggtgtcacgctcgtcgttgggtatggcttcattcagctccggttcccaacgatcaaggcgagttacatgatccccat  
ggtgtgcaaaaaagcggttagctccttcggtcctccgatcgttgcagaagtaagttggccgagtggtatcactcatggttatggcagcactg  
cataattcttactgtcatgccatccgtaagatcgttttctgtgactggtgagtactcaaccaagtcattctgagaatagtgtatcgggcgaccg  
agttgctcttgcccgcggtcaaacagggataataccgcgccacatagcagaactttaaaagtgtcatcattggaaaacgttcttcggggcg  
aaaactctcaaggatcttaccgctgttgagatccagttcgtgtaaccactcgtgcaccaactgatcttcagcatcttttactttcaccagcgt  
ttctgggtgagcaaaaaacagggaaggcaaaatgccgcaaaaaagggaataaggcgacacggaaatgttgaaactcactacttcttcttttc  
aatattattgaagcatttatcagggttattgtctcatgagcggatacatatttgatgtatttagaaaaataacaaatagggggtccgcgcacatt  
tccccgaaaagtgccacctgacgtctaagaaaccattattatcatgacattaacctataaaaataggcgtatcacgaggcccttctgtcttcaa  
ggatccgaattccgggagagctcgatcgcacgtttaaattaattaa

Please amend Table 8 on pages 363-374 as follows:

Table 8: Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

```
1 catcatcaat aatatacctt attttggatt gaagccaata tgataatgag ggggtggagt
61 ttgtgacgtg ggcgggggcg tgggaacggg gcgggtgacg tagtagtgtg gcggaagtgt
121 gatgttgcaa gtgtggcgga acacatgtaa gcgacggatg tggcaaaagt gacgtttttg
181 gtgtgcgccg gtgtacacag gaagtgacaa ttttcgcgcg gttttaggcg gatgtttag
241 taaatttggg cgtaaccgag taagatttgg ccattttcgc gggaaaactg aataagagga
301 agtgaaatct gaataatttt gtgttactca tagcgcgtaa tatttgtcta gggccgcggg
361 gactttgacc gtttactgtg agactcgccc aggtgttttt ctgaggtgtt ttccgcgttc
421 cgggtcaaag ttggcgtttt attattatag tcagtcgaag cttgatccg gtaccttag
481 aattctcgag cggccgctag cgacatcgat cacaagttt tacaaaaag caggctttaa
541 aggaaccaat tcagtcgact ctgaggatc gaaaccatcc tctgctatat ggccgcatat
601 attttacttg aagactagga ccctacagaa aaggggtttt aaagtaggcg tgctaaactg
661 cagcggacct gacccgtgta agaaccaca aggtatcctg gtggaaatgc gcattttag
721 gcttcaatat ctgtaacctt actaattagg tgtggagagc tttagccag ttcttaggt
781 ttggagacca ttaggggtt ggcgtgtggc cccctcgtaa agtcttctg acttctaca
841 tcagacaagt ctgcaattt gcaatatctc ttttagccaa tatctaaatc tttaaaattt
901 tgattttgtt tttaccag gatgagagac attccagagt tgttacctt tcaaaataaa
961 caaatttaaa gatgtctgtg aaaagaaaca tatattctc atgggaatat atccaggtt
1021 ttgaaggagg tacgacctg agatctctat cactgatagg gagactcgag tgtagctgt
1081 gccgagtggg taaggcgatg gactctaaat ccattggggg ctccccgcgc aggttcgaat
1141 cctgccgact acggcgtgct tttttactc tcgggtagag gaaatccggt gcactacctg
1201 tgcaatcaca cagaataaca tggagtagta cttttattt tcctgttatt atctttctc
1261 ataaaagtgg aaccagataa ttttagttt tttgtgaac aagactagag atttttgaa
1321 gtgttacatt ggaaagcact tgaaaacaca agtaatttct gacactgcta taaaatgat
1381 ggaaaaacgc tcaagttgtt ttgcctttca gtcttctga aatgctgtct ccctatctga
1441 aatccagctc acgtctgact tccaaaaccg tgcttgctt taacttatgg aataaatatc
1501 tcaaacagat ccccgggcga gtcgaattc gcggccgcac tcgagatatt tagaccagc
1561 tttctgtac aaagtgtgta tcgattcgac agatcactga aatgtgtggg cgtggcttaa
1621 ggggtggaaa gaatatataa ggtgggggtc ttatgtagt ttgtatctg ttgcagcag
1681 ccgccgccgc catgagcacc aactcgtttg atggaagcat tgtgagctca tatttgacaa
1741 cgcgcatgcc cccatgggcc ggggtgcgtc agaattgat gggctccagc attgatggtc
1801 gccccgtct gcccgcaaac tctactacct tgacctacga gaccgtgtct ggaacgccgt
1861 tggagactgc agcctccgcc gccgttcag ccgtgcagc caccgcccgc gggattgtga
1921 ctgactttgc tttctgagc ccgttgcaa gcagtgcagc tttccgttca tccgccgcg
1981 atgacaagt gacggctctt ttggcacaat tggattctt gaccgggaa cttaatgtc
2041 tttctcagca gctgttggat ctgcgccagc aggtttctg cctgaaggct tctcccctc
2101 ccaatgcggt taaaaacata aataaaaaac cagactctgt ttgatttgg atcaagcaag
2161 tgtcttctg tctttattt ggggttttgc gcgcgcggtt ggcccgggac cagcggctc
2221 ggtcgttgag ggtcctgtgt atttttcca ggacgtggtt aaggtgactc tggatgttca
2281 gatacatggg cataagcccc tctctggggg ggaggtagca cactgcaga gttcatgct
2341 gcgggggtgt gtttagatg atccagtcgt agcaggagcg ctgggcgtgg tgcctaaaaa
2401 tgtcttcag tagcaagctg attgccagg gcaggccctt ggtgtaagt ttacaaagc
2461 ggtaagctg gtaggggtgc atacgtgggg atatgagatg catcttgac tgtatttta
2521 ggttggtctat gttccagcc atatccctc ggggattcat gttgtcaga accaccagca
```

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

2581 cagtgtatcc ggtgcacttg ggaaatttgt catgtagctt agaaggaaat gcgtggaaga  
2641 acttgagac gcccttgtga cctccaagat ttccatgca ttcgtccata atgatggcaa  
2701 tgggccacg ggcggggcc tgggcgaaga ttttctggg atcactaacg tcatagttgt  
2761 gttccaggat gagatcgta taggccattt ttacaaagcg cgggcggagg gtgccagact  
2821 gcggtataat ggttccatcc ggcccagggg cgtagttacc ctacagatt tgcattccc  
2881 acgcttgag ttcagatggg gggatcatgt ctacctgcg ggcgatgaag aaaacggtt  
2941 ccgggtagg ggagatcagc tgggaagaaa gcaggttct gagcagctgc gacttaccg  
3001 agccggtggg ccgtaaatc acacctatta ccgggtgcaa ctggtagtta agagagctgc  
3061 agctgccgtc atccctgagc aggggggcca ctctgtaag catgtccctg actcgcagt  
3121 ttccctgac caaatccgcc agaaggcgt cgccgccag ctagagcagt tctgcaagg  
3181 aagcaaagt ttcaacggt ttgagaccgt ccgccgtagg catgctttg agcgttgac  
3241 caagcagttc caggcgggtc cacagctcgg tcacctgctc tacggcatct ctagccagca  
3301 tatctctcg ttctcgggt tggggcggt ttcgtgtac ggcagtagtc ggtgctcgtc  
3361 cagacgggcc aggtcatgt cttccacgg gcgcagggc ctcgtcagcg tagtctgggt  
3421 cacggtgaag ggggtgcgtc cgggtgcgc gctggccagg gtgcgctga ggtggtcct  
3481 gctggtgctg aagcgtgcc ggtcttcgcc ctgcgcgtc gccaggtagc attgacat  
3541 ggtgtcatag tccagccct ccgcggcgtg gcccttggcg cgcagcttc cttggagga  
3601 ggcgcccac gaggggcagt gcagacttt gagggcgtag agcttggcg cgagaaata  
3661 cgattccggg gagtagcat ccgcgccga gggccgcag acggtctgc attccagag  
3721 ccaggtgagc tctggcgtt cgggtcaaa aaccaggtt ccccatgct tttgatgcg  
3781 ttcttacct ctggttcca tgagccgtg tccacgtcg gtgacgaaa ggtgtcgt  
3841 gtccccgtat acagactga gaggcctgtc ctgagcgtt gttccgcgtt cctctcgt  
3901 tagaaactcg gacctctg agacaaaggc tcggtccag gccagcacga aggaggtaa  
3961 gtgggagggg tagcggtcgt tgtccactag ggggtccact cgtccaggg tgtgaagaca  
4021 catgtcgcc tctcggcat caaggaagg gattggttg tagtgtagg ccacgtgacc  
4081 ggtgttct gaaggggggc tataaagg ggtggggcg cgttcgtct cactcttc  
4141 cgcacgtc tctgcaggg ccagctgtt gggtagtac tccctctgaa aagcgggcat  
4201 gacttctgc ctaagattgt cagtttcaa aaacgaggag gatttgatat tcacctggc  
4261 cgcggtgat ccttgaggg tggccgcat catctgttca gaaaagacaa tcttttgt  
4321 gtcaagctg gtggcaaac acccgtagag ggcgttgac agcaacttg cgatggagcg  
4381 cagggttg ttttgcgc gatcggcgc ctcttggcc gcgatgtta gctgcacga  
4441 ttcgcgcga acgcaccgc attcgggaaa gacggtgtg cgtcgtcgg gcaccaggtg  
4501 cacgcgcaa ccgcggtgt gcagggtgac aaggtcaac ctggtggcta cctctccgc  
4561 taggcgtc tttgtccag agaggcgcc gcccttgcgc gagcagaat gcggtaggg  
4621 gtctagctg gtctgtccg ggggtctgc gtccacggt aagaccccg gcagcaggcg  
4681 cgcgtcgaag tagtctatc tgcattctt caagtctag gcctgtgcc atgcgcggc  
4741 ggcaagcgc cgtcgtatg ggtgagtg gggacccat ggcaggggt ggtgagcgc  
4801 ggagcgta atgccgaaa tgcgtaaac gtagagggc tctctagta ttcaagata  
4861 ttagggtag catctccac cgcgatgct ggcgcgcac taatctata gttcgtcga  
4921 gggagcgagg aggtcgggac cgaggtgct acggcgggc tgcctgctc ggaagactat  
4981 ctgcctgaag atggcatgt agttgatga tatggttga cgtggaaga cgtgaagct  
5041 ggcgtctgt agacctacc cgtcacgc gaaggaggcg taggagtcgc gcagctgtt  
5101 gaccagctc gcggtgacct gcagcttag ggcgagtag tccagggtt cttgatgat  
5161 gtcatacta tctgtcct tttttcca cagctcgcg ttgaggaaa actctcgcg  
5221 gtcttccag tactcttga tcggaaacc gtcggcctc gaacgtaag agcctagcat

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

5281 gtagaactgg ttgacggcct ggtagggcga gcatccctt tctacgggta gcgcgtatgc  
 5341 ctgcgcggcc ttccggagcg aggtgtgggt gagcgcaaag gtgtccctga ccatgacttt  
 5401 gaggtactgg tatttgaagt cagtgtcgtc gcatccgccc tctcccaga gcaaaaagtc  
 5461 cgtgcgcttt ttggaacgcg gatttggcag ggcgaagggt acatcgttga agagtatctt  
 5521 tcccgcgcga ggcataaagt tgcgtgtgat gcggaagggt cccggcacct cggaacgggt  
 5581 gtttaattacc tggcgggcga gcacgatctc gtcaaagccg ttgatgttgt ggcccacaat  
 5641 gtaaagtcc aagaagcgcg ggatgccctt gatggaaggc aatttttaa gttcctcgta  
 5701 ggtgagctct tcaggggagc tgagcccgtg ctctgaaagg gccagctctg caagatgagg  
 5761 gttggaagcg acgaatgagc tccacaggtc acgggccatt agcatttgca ggtggtcgcg  
 5821 aaaggtccta aactggcgac ctatggccat ttttctggg gtgatgcagt agaaggtaag  
 5881 cgggtcttgt tcccagcggg cccatccaag gttcgcgggt aggtctcgcg cggcagtcac  
 5941 tagaggctca tctccgccga acttcatgac cagcatgaag ggcacgagct gctcccaaa  
 6001 ggcccccatc caagtatagg tctctacatc gtaggtgaca aagagacgt cgggtgcgagg  
 6061 atcgagccg atcgggaaga actggatctc ccgccaccaa ttggaggagt ggctattgat  
 6121 gtggtgaaag tagaagtccc tgcgacgggc cgaacactcg tgctggcttt tgtaaaaacg  
 6181 tgcgcagtac tggcagcggg gcacgggctg tacatctgc acgaggttga cctgacgacc  
 6241 gcgcacaagg aagcagagtg ggaatttgag cccctcgcct ggcggtttg gctggtggtc  
 6301 ttctactcgt gctgcttgc cttgaccgtc tggctgctc aggggagtta cgggtgatcg  
 6361 gaccaccacg ccgcgcgagc ccaaagtcca gatgtccgcg cgcggcggtc ggagcttgat  
 6421 gacaacatcg cgcagatggg agctgtccat ggtctggagc tcccgcggcg tcaggtcagg  
 6481 cgggagctcc tgcaggttta cctcgcatag acgggtcagg gcgcgggcta gatccaggtg  
 6541 atacctaat tccagggggt ggttgggtgc ggcgtcgtg gcttgcaaga ggccgcatcc  
 6601 ccgcggcgcg actacggtac cgcgcggcgg gcggtgggccc gcgggggtgt ctttgatga  
 6661 tgcactctaa agcggtagc cgggcgagcc cccggaggta gggggggctc cggaccgcc  
 6721 gggagagggg gcaggggcac gtcggcgccg cgcgcgggca ggagctggtg ctgcgcgctg  
 6781 aggttgcgtg cgaacgcgac gacgcggcgg ttgatctctt gaatctggcg cctctgcgtg  
 6841 aagacgacgg ccccgtgag cttgagcctg aaagagagtt cgacagaatc aatttcggtg  
 6901 tcgttgacgg cggcctggcg caaaatctcc tgcacgtctc ctgagttgtc ttgataggcg  
 6961 atctcgcca tgaactgtc gatctcttcc tcttgagat ctcgcgtcc ggctcgtcc  
 7021 acggtggcgg cgaggtcgtt ggaaatgcgg gccatgagct gcgagaaggc gttgaggcct  
 7081 cctcgttcc agacgcggct gtagaccacg ccccttcgg catcgcgggc gcgcatgacc  
 7141 acctgcgcga gattgagctc cacgtccgg gcgaagacgg cgtagtttcg caggcgctga  
 7201 aagaggtagt tgagggtggt ggcggtgtgt tctgccacga agaagtacat aaccagcgt  
 7261 cgcaacgtgg atcgttgat atccccaaag gctcaaggc gctccatggc ctctagaag  
 7321 tccacggcga agttgaaaaa ctgggagttg cgcgccgaca cggttaactc ctctccaga  
 7381 agacggatga gctcggcgac agtgcgcgc acctcgcgt caaaggctac aggggcctct  
 7441 tcttctctt caatctctc ttccataagg gctccccctt ctctcttc tggcggcggg  
 7501 gggggagggg ggacacggcg gcgacgacgg cgcaccggga ggcggtcgac aaagcgctcg  
 7561 atcatctccc cgcggcgacg gcgcatggtc tggtagcgg cgcggcgtt ctgcggggg  
 7621 cgagttgga agacgccgcc cgtcatgtcc cgttatggg ttggcggggg gctgccatgc  
 7681 ggcagggata cggcgctaac gatcatctc aacaattgtt gttaggtac tccgccgccg  
 7741 agggacctga gcgagtcgc atcaccgga tcggaaaacc tctcagaaa ggcgtctaac  
 7801 cagtcacagt cgcaaggtag gctgagcacc gtggcggcg gcagcggcg gcggtcgggg  
 7861 ttgttctgg cggaggtgct gctgatgat taattaaagt aggcggtct gagacggcg  
 7921 atggtcgaca gaagccat gtcctgggt ccggcctgct gaatcgcag gcggtcggcc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

7981 atgccccagg ctctgttttg acatcggcgc aggtctttgt agtagtcttg catgagcctt  
 8041 tctaccgga cttctcttc tccttctct tgcctgcat ctctgcatc tatcgtgcg  
 8101 gcggcgggc agtttgccg taggtggcgc cctcttctc ccatgcgtgt gaccccgaag  
 8161 cccctcatcg gctgaagcag ggctaggtcg gcgacaacgc gctcggctaa tatggcctgc  
 8221 tgcacctgcg tgagggtaga ctggaagtca tccatgtcca caaagcgggtg gtatgcgcc  
 8281 gtgttgatgg tgtaagtga gttggccata acggaccagt taacggctcg gtgaccggc  
 8341 tgcgagagct cgtgtacct gagacgcgag taagccctcg agtcaaatac gtagtcgttg  
 8401 caagtccgca ccaggtactg gtatccacc aaaaagtgcg gcggcggctg gcggtagagg  
 8461 ggccagcgta ggggtggcgg ggctccgggg gcgagatctt ccaacataag gcgatgat  
 8521 ccgtagatgt acctggacat ccaggtgatg ccggcggcgg tgggtggaggc gcgcggaaag  
 8581 tcgcgacgc ggtccagat gttgcgcagc ggcaaaaagt gctccatggt cgggacgctc  
 8641 tggccggta ggcgcgcga atcgttgacg ctctagaccg tgcaaaagga gagcctgtaa  
 8701 gcgggcactc ttccgtggc tgggtggataa attcgcaagg gtatcatggc ggacgaccgg  
 8761 ggttcgagcc ccgtatccg ccgtccgccg tgatccatgc ggttaccgcc cgcgtgtcga  
 8821 acccaggtgt gcgacgtcag acaacggggg agtgctcctt ttggcttct tccaggcgcg  
 8881 gcggctgctg cgctagcttt ttggccact ggccgcgcgc agcgtaaagc gttaggctgg  
 8941 aaagcgaaag cattaagtgg ctgcctccct gtagccggag ggtattttc caagggtga  
 9001 gtcgcgggac ccccggttcg agtctcggac cggccggact gcggcgaacg ggggtttgcc  
 9061 tccccgtcat gcaagacccc gcttgcaaat tctccggaa acaggagca gccctttt  
 9121 tgctttccc agatgcatcc ggtgctgcg cagatgcgcc cccctctca gcagcggcaa  
 9181 gagcaagagc agcggcagac atgcagggca cctccccctc ctctaccgc gtcaggaggg  
 9241 gcgacatccg cgttgacgc ggcagcagat ggtgattacg aacccccgcg gcgccgggcc  
 9301 cggcactacc tggacttggg gaggggcgag ggctgggcgc ggctaggagc gccctctct  
 9361 gagcgttacc caagggtgca gctgaagcgt gatacgcgtg aggcgtacgt gccgcggcag  
 9421 aacctgttc gcgaccgca gggagaggag cccgaggaga tgcgggatcg aaagtccac  
 9481 gcagggcgcg agctgcggca tggcctgaat cgcgagcggg tgcgcgcga ggaggacttt  
 9541 gagcccagc gcggaaccgg gattatccc gcgcgcgcac acgtggcggc gcccgacctg  
 9601 gtaaccgcat acgagcagac ggtgaaccag gagattaact tcaaaaaag cttaacaac  
 9661 cacgtgcgta cgcttggtgc gcgcgaggag gtggctatag gactgatgca tctgtgggac  
 9721 tttgtaagc cgctggagca aaacccaaat agcaagccgc tcatggcgca gctgttcct  
 9781 atagtgcagc acagcaggga caacgaggca ttcagggatg cgctgctaaa catagtagag  
 9841 cccgagggcc gctggctgct cgatttgata aatccctgc agagcatagt ggtgcaggag  
 9901 cgcagcttga gcctggctga caaggtggcc gccatcaact attccatgct tagcctgggc  
 9961 aagttttac cccgcaagat ataccatacc ccttacgttc ccatagacaa ggaggtaaag  
 10021 atcgaggggt tcatatgcg catggcgtg aaggtgctta ccttgagcga cgacctgggc  
 10081 gtttatcgca acgagcgcac ccacaaggcc gtgagcgtga gccggcggcg cgagctcagc  
 10141 gaccgcgagc tgatgcacag cctgcaaagg gccctggctg gcacgggcag cggcgataga  
 10201 gagccgagc cctactttga cgcgggcgct gacctgcgtt gggcccaag ccgacgcgcc  
 10261 ctggaggcag ctggggcccg acctgggctg gcggtggcac ccgcgcgcgc tggcaacgtc  
 10321 ggccggcgtg aggaatatga cgaggacgat gtagtagagc cagaggacgg cgagtactaa  
 10381 gcggtgatgt ttctgatcag atgatgcaag acgcaacgga cccggcgggtg cgggcggcgc  
 10441 tgcagagcca gccgtccggc cttaactcca cggacgactg gcgccaggtc atggaccgca  
 10501 tcatgtcgt gactgcgcgc aatcctgacg cgttccggca gcagccgag gccaacggc  
 10561 tctccgcaat tctggaagcg gtggtcccg cgcgcgcaaa cccacgcac gagaaggtgc  
 10621 tggcgatcgt aaacgcgctg gccgaaaaca gggccatccg gcccgacgag gccggcctgg

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

10681 tctacgacgc gctgcttcag cgcgtggctc gttacaacag cggcaacgtg cagaccaacc  
 10741 tggaccggct ggtgggggat gtgcgcgagg ccgtggcgca gcgtgagcgc gcgcagcagc  
 10801 agggcaacct gggctccatg gttgactaa acgccttcct gactacacag cccgccaacg  
 10861 tgccgcgggg acaggaggac tacaccaact ttgtgagcgc actgcggcta atggtgactg  
 10921 agacaccgca aagtgaggtg taccagtctg ggccagacta tttttccag accagtagac  
 10981 aaggcctgca gaccgtaaac ctgagccagg ctttcaaaaa ctgacggggg ctgtgggggg  
 11041 tgcgggctcc cacaggcgac cgcgcgaccg tgtctagctt gctgacgccc aactcgcgc  
 11101 tgttctgct gctaatacgc cccttcacgg acagtggcag cgtgtcccgg gacacatacc  
 11161 taggtcactt gctgacactg taccgcgagg ccataggtca ggcgcatgtg gacgagcata  
 11221 ctttcagga gattacaagt gtcagccgcg cgtgggggca ggaggacacg ggcagcctgg  
 11281 aggcaacctt aaactacctg ctgaccaacc ggcggcagaa gatcccctcg ttgcacagtt  
 11341 taaacagcga ggaggagcgc atttgcgct acgtgcagca gagcgtgagc cttaacctga  
 11401 tgcgcgacgg ggtaacgccc agcgtggcgc tggacatgac cgcgcgcaac atggaaccgg  
 11461 gcatgtatgc ctcaaaccgg ccgtttatca accgccta at ggactacttg catcgcgcgg  
 11521 ccgccgtgaa ccccgagtat ttaccaatg ccatcttgaa cccgcactgg ctaccgccc  
 11581 ctggtttcta caccggggga ttgaggtgc ccgagggtaa cgatggattc ctctgggacg  
 11641 acatagacga cagcgtgttt tccccgcaac cgcagaccct gctagagttg caacagcgcg  
 11701 agcaggcaga ggcggcgctg cgaaaggaaa gctccgcag gccaagcagc ttgtccgatc  
 11761 taggcgctgc ggccccgagg tcagatgcta gtagccatt tccaagcttg atagggtctc  
 11821 ttaccagcac tcgcaccacc cgcggcgcc tgcctggcga ggaggagtac ctaaacaact  
 11881 cgctgctgca gccgcagcgc gaaaaaacc tgcctccggc atttccaac aacgggatag  
 11941 agagcctagt ggacaagatg agtagatgga agacgtacgc gcaggagcac agggacgtgc  
 12001 caggcccgcg cccgccacc cgtcgtcaaa ggcacgaccg tcagcggggt ctggtgtggg  
 12061 aggacgatga ctgcgcagac gacagcagcg tcttgattt gggaggaggt ggcaaccgt  
 12121 ttgcgcacct tcgcccagg ctggggagaa tgtttaaaa aaaaaaagc atgatgcaa  
 12181 ataaaaaact caccaaggcc atggcaccga gcgttggtt tcttgattc cccttagtat  
 12241 gcggcgcgcg gcgatgtat aggaaggtcc tctccctcc tacgagagtg tggtagcgc  
 12301 ggcgccagtg gcggcgcgcg tgggttctcc ctctgatgt cccctggacc cgccgtttgt  
 12361 gcctccgagg tacctgcggc ctaccggggg gagaaacagc atccgttact ctgagttggc  
 12421 accctattc gacaccacc gtgtgtacct ggtggacaac aagtcaacgg atgtggcatc  
 12481 cctgaactac cagaacgacc acagcaactt tctgaccac gtcattcaa acaatgacta  
 12541 cagcccgggg gaggcaagca cacagacat caatctgac gaccggtcgc actggggcgg  
 12601 cgacctgaaa accatcctgc ataccaacat gccaatgtg aacgagtca tgtttacaa  
 12661 taagtttaag gcgcgggtga tgggtgcgc cttgcctact aaggacaac aggtggagct  
 12721 gaaatacgag tgggtggagt tcacgtgcc cgagggcaac tactccgaga ccatgacct  
 12781 agaccttatg aacaacgcga tctggagca ctactgaaa gtgggcagac agaacgggt  
 12841 tctgaaaagc gacatcgggg taaagttga caccgcaac tcagactgg ggttgacc  
 12901 cgtcactggc cttgtcatgc ctgggtata taaaacgaa gccttccatc cagacatcat  
 12961 tttgtgcca gcatgcgggg tgacttcac ccacagccgc ctgagcaact tgttggcat  
 13021 ccgaagcgg caaccttcc aggagggtt taggatcacc tacgatgatc tggagggtg  
 13081 taacattccc gactgttg atgtggacgc ctaccaggcg agcttgaaag atgacaccga  
 13141 acaggcggg ggtggcgag gcggcgcaa cagcagtggc agcggcgcg aagagaactc  
 13201 caacgcggca gccgcggcaa tgcagccggt ggaggacatg aacgatcatg ccattcgcgg  
 13261 cgacacctt gccacacggg ctgaggagaa gcgcgctgag gccgaagcag cggccgaagc  
 13321 tgccgcccc gctgcgcaac ccgaggtcga gaagcctcag aagaaaccgg tgatcaaac

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

13381 cctgacagag gacagcaaga aacgcagtta caacctaata agcaatgaca gcaccttcac  
 13441 ccagtaccgc agctgggtacc ttgcatacaa ctacggcgac cctcagaccg gaatccgctc  
 13501 atggaccctg ctttgcactc ctgacgtaac ctgcggctcg gagcaggtct actggctggt  
 13561 gccagacatg atgcaagacc ccgtgacctt ccgctccacg cgccagatca gcaactttcc  
 13621 ggtggtgggc gccgagctgt tgcccgtgca ctccaagagc ttctacaacg accaggccgt  
 13681 ctactcccaa ctcatccgcc agtttacctc tctgaccac gtgttcaatc gcttcccgga  
 13741 gaaccagatt ttggcgcgcc cgccagcccc caccatcacc accgtcagtg aaaacgttcc  
 13801 tgctctcaca gatcacggga cgtaccgct gcgcaacagc atcggaggag tccagcgagt  
 13861 gaccattact gacgccagac gccgcacctg ccctacgtt tacaaggccc tgggcatagt  
 13921 ctgccgcgc gtctatcga gccgcacttt ttgagcaagc atgtccatcc ttatatcgcc  
 13981 cagcaataac acaggctggg gcctgcgctt cccaagcaag atgtttggcg gggccaagaa  
 14041 gcgtccgac caacaccag tgcgcgtgcg cgggcactac cgcgcgccct ggggcgcgca  
 14101 caaacgcggc cgcactgggc gcaccaccgt cgtgacgcc atcgacgcgg tggtaggagga  
 14161 ggcgcgcaac tacacgcca cgccgccacc agtgtccaca gtggacgcgg ccattcagac  
 14221 cgtggtgcgc ggagcccgcc gctatgctaa aatgaagaga cggcggaggc gcgtagcacg  
 14281 tcgccaccgc cgccgaccgc gactgccgc ccaacgcgcg cggcgggccc tgcttaaccg  
 14341 cgcacgtcgc accggccgac gggcggccat gcgggcccgt cgaaggctgg ccgcgggtat  
 14401 tgctactgtg cccccagggt ccaggcgacg agcggccgcc gcagcagccg cggccattag  
 14461 tgctatgact cagggtcgca ggggcaacgt gtattgggtg cgcgactcgg ttagcggcct  
 14521 gcgcgtgccc gtgcgcaccc gccccccgcg caactagatt gcaagaaaaa actacttaga  
 14581 ctctactgtg tgtatgtatc cagcggcggc ggcgcgcaac gaagctatgt ccaagcgcaa  
 14641 aatcaaagaa gagatgctcc aggtcatcgc gccggagatc tatggcccc cgaagaagga  
 14701 agagcaggat tacaagcccc gaaagctaaa gcgggtcaaa aagaaaaaga aagatgatga  
 14761 tgatgaactt gacgacgagg tggaaactgt gcacgtacc gcgccaggc gacgggtaca  
 14821 gtggaaaggt cgacgcgtaa aacgtgtttt gcgaccggc accaccgtag tctttacgcc  
 14881 cggtagcgcg tccaccgca cctacaagcg cgtgtatgat gaggtgtacg gcgacgagga  
 14941 cctgcttgag caggccaacg agcgctcgg ggagtttgcc tacggaaagc ggcataagga  
 15001 catgctggcg ttgccgtg acgagggcaa cccaacacct agcctaaagc ccgtaacact  
 15061 gcagcagggt ctgcccgcgc ttgcaccgtc cgaagaaaag cgcggcctaa agcgcgagtc  
 15121 tgggtgactt gcaccaccg tgcagctgat ggtacccaag cgccagcgac tggaagatgt  
 15181 cttgaaaaa atgaccgtg aacctgggct ggagcccag gtccgcgtgc ggccaatcaa  
 15241 gcaggtggcg ccgggactgg gcgtgcagac cgtggacgtt cagataccca ctaccagtag  
 15301 caccagtatt gccaccgcca cagaggcat ggagacacaa acgtccccgg ttgcctcagc  
 15361 ggtggcggat gccgcggtgc aggcggtcgc tgcggccgcg tccaagacct ctacggaggt  
 15421 gcaaacggac ccgtggatgt ttgcgtttc agcccccg cgccgcgcg gtgcaggaa  
 15481 gtacggcgcc gccagcgcg tactgcccga atatgcccta catccttcca ttgcgcctac  
 15541 ccccggtat cgtggctaca cctaccgcc cagaagacga gcaactacc gacgccgaac  
 15601 caccactgga acccgccgcc gccgtgcgcg tcgccagccc gtgctggccc cgatttcgt  
 15661 gcgcagggtg gctcgcgaag gaggcaggac cttggtgtg ccaacagcgc gctaccacc  
 15721 cagcatcgtt taaaagccgg tctttgtggt tcttgcat atggccctca cctgccgcct  
 15781 ccgtttcccg gtgccgggat tccgaggaag aatgcaccgt aggaggggca tggccggcca  
 15841 cggcctgacg ggcggcatgc gtcgtgcgca ccaccggcg cggcgcgct cgcaccgtcg  
 15901 catgcgcggc ggtatcctgc cctccttat tccactgat gccgcggcga ttggcgccgt  
 15961 gcccggaatt gcatccgtg cttgcaggc gcagagacac tgattaaaaa caagtgcgt  
 16021 gtggaaaaa caaaataaaa agtctggact ctacgctcg cttggtctg taactattt

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

16081 gtagaatgga agacatcaac ttgctgtctc tggccccgcg acacggctcg cgcccgttca  
16141 tgggaaactg gcaagatata ggcaccagca atatgagcgg tggcgcttc agctggggct  
16201 cgctgtggag cggcattaaa aatttcggtt ccaccgttaa gaactatggc agcaaggcct  
16261 ggaacagcag cacaggccag atgctgaggg ataagttgaa agagcaaaa ttccaacaaa  
16321 aggtggtaga tggcctggcc tctggcatta gcgggggtgt ggacctggcc aaccaggcag  
16381 tgcaaaataa gattaacagt aagcttgatc cccgccctcc cgtagaggag cctccaccgg  
16441 ccgtggagac agtgtctcca gaggggcgtg gcgaaaagcg tccgcgcccc gacagggaag  
16501 aaactctggt gacgcaaata gacgagcctc cctcgtacga ggaggcacta aagcaaggcc  
16561 tgcccaccac cgttccatc gcgcccatgg ctaccggagt gctgggccag cacacaccgg  
16621 taacgctgga cctgcctccc ccgcccagca cccagcagaa acctgtgctg ccaggccccga  
16681 ccgccgttgt tgtaaccctg cctagccgcg cgtccctgcg ccgcccgcgc agcggtccgc  
16741 gatcgttgcg gcccgtagcc agtggcaact ggcaaagcac actgaacagc atcgtgggtc  
16801 tgggggtgca atccctgaag cgccgacgat gcttctgaat agctaactg tctgtatgtt  
16861 gtcattgatg cgtccatgct gccgccagag gagctgctga gccgccgcgc gcccgcttc  
16921 caagatggct accccttoga tgatgccgca gtggtcttac atgcacatc cgggccagga  
16981 cgctcggag tacctgagcc ccgggctggt gcagtttccc cgcgccaccg agacgtactt  
17041 cagcctgaat aacaagtta gaaacccac ggtggcgctt acgcacgacg tgaccacaga  
17101 ccggtcccag cgtttgacgc tgcggttcat cctgtggac cgtgaggata ctgctactc  
17161 gtacaaggcg cggttcacc tagctgtggg tgataaccgt gtgctggaca tggcttccac  
17221 gtactttgac atccgcggcg tctgtgacag gggccctact ttaagccct actctggcac  
17281 tgctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg atgaagctgc  
17341 tactgtctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg aagtagacga  
17401 gcaagctgag cagcaaaaaa ctacgtatt tgggcaggcg ccttattctg gtataaatat  
17461 taaaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaatatg ccgataaaac  
17521 attcaacct gaacctcaa taggagaatc tcagtgttac gaaactgaa ttaatcatgc  
17581 agctgggaga gtccttaaaa agactacccc aatgaaacca tgttacggtt catatgcaa  
17641 accacaaat gaaaatggag ggcaaggcat tctgtaaag caacaaatg gaaagctaga  
17701 aagtcaagt gaaatgcaat tttctcaac tactgaggcg accgcaggca atggtgataa  
17761 cttgactcct aaagtgtat gtacagtga agatgtatg atagaaacc cagacactca  
17821 tatttcttac atgccacta ttaaggaagg taactcacga gaactaatg gccacaatc  
17881 tatgccaac aggcctaatt acattgctt tagggacaat ttattggtc taatgtatta  
17941 caacagcacg ggtaatatg gtgttctggc gggccaagca tcgcagtga atgctgtgt  
18001 agatttgcaa gacagaaaca cagagcttc ataccagctt ttgcttgatt ccattggtga  
18061 tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgac cagatgttag  
18121 aattattgaa aatcatggaa ctgaagatga acttccaaat tactgcttc cactgggagg  
18181 tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg aaaatggatg  
18241 ggaaaaagat gctacagaat ttccagataa aatgaaata agagttggaa ataatttgc  
18301 catggaaatc aatctaatg ccaacctgtg gagaaattc ctgtactcca acatagcgct  
18361 gtatttggcc gacaagctaa agtacagtc ttccaacgta aaaatttctg ataaccaaa  
18421 cacctacgac tacatgaaca agcagtggt ggctcccggg ttagtgact gctacattaa  
18481 ccttgagca cgtgtgtccc ttagctatat ggacaacgtc aaccattta accaccaccg  
18541 caatgtggc ctgcgtacc gctcaatgt gctgggcaat ggtcgctatg tgccttcca  
18601 catccagggt cctcagaagt tcttgccat taaaacctc ctctcctgc cgggctcata  
18661 cacctacgag tggaactca ggaaggatgt taacatggt ctgcagagct ccctaggaaa



Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

18721 tgacctaaagg gttgacggag ccagcattaa gttgatagc atttgccctt acgccacctt  
 18781 cttcccatg gccacaaca ccgctccac gcttgaggcc atgcttagaa acgacaccaa  
 18841 cgaccagtcc ttaacgact atctctccg cgccaacatg ctctacccta taccgcgcaa  
 18901 cgtaccaac gtgcccataat ccacccctc ccgcaactgg gcggctttcc gcggctgggc  
 18961 cttcacgcgc ctaagacta aggaaccccc atcactgggc tggggtacg acccttatta  
 19021 cacctactct ggctctatac cctacctaga tggaaacctt tacctcaacc acaccttaa  
 19081 gaagtgggcc attaccttg actctctgt cagctggcct ggcaatgacc gcctgcttac  
 19141 ccccaacgag ttgaaatta agcgtcagt tgacggggag ggttacaacg ttgccagtg  
 19201 taacatgacc aaagactggg tctgtgtaca aatgctagct aactacaaca ttggctacca  
 19261 gggcttctat atcccagaga gctacaagga ccgcatgtac tcttcttta gaaactcca  
 19321 gccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac aggtgggcat  
 19381 cctacaccaa cacaacaact ctggattgt tggctacctt gcccaccca tgcgcgaagg  
 19441 acaggcctac cctgctaact tccctatcc gcttataggc aagaccgcag ttgacagcat  
 19501 taccagaaa aagtttctt gcgatgcac ctttggcgc atccattct ccagtaactt  
 19561 tatgtccatg ggcgcactca cagacctggg ccaaacctt ctctacgcca actccgcca  
 19621 cgcgctagac atgactttt aggtggatcc catggacgag cccaccctt tttatgttt  
 19681 gtttgaagtc ttgacgtgg tccgtgtgca ccggccgcac cgcggcgta tcgaaaccgt  
 19741 gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca agcaacatca  
 19801 acaacagctg ccgcatggg ctccagttag caggaactga aagccattgt caaagatctt  
 19861 ggttggtggc catattttt gggcacctat gacaagcgt ttccaggctt tgtttctca  
 19921 cacaagctcg cctgcgcat agtcaatac gccggtcgc agactggggg cgtacactgg  
 19981 atggccttg cctggaaccc gactcaaaa acatgctacc tcttgagcc ctttgctt  
 20041 tctgaccage gactcaagca ggtttaccag ttgagtacg agtactct gcgccgtagc  
 20101 gccattgctt ctccccga ccgctgtata acgctgaaa agtccacca aagcgtacg  
 20161 gggcccaact cggccgctg tggactattc tgctgcatgt ttccacgc ctttgccaac  
 20221 tggcccaaaa ctccatgga tcacaacccc accatgaacc ttattaccgg ggtaccaac  
 20281 tccatgctca acagtccca ggtacagccc accctgcgc gcaaccagga acagtctac  
 20341 agcttcttg agcgccact gcctacttc cgcagccaca gtgcgcagat taggagcgc  
 20401 acttctttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac ttcaataaa  
 20461 ggcaaatgct tttattgta cactctggg tgattattta ccccaccct tgcgtctgc  
 20521 gccgtttaa aatcaaagg gttctgccg gcacgctat gcgccactgg caggacacg  
 20581 ttgcgatact ggtgttagt gctccacta aactcaggca caaccatcc cggcagctc  
 20641 gtgaagttt cactccacag gctgcgcacc ataccaacg cgttagcag gtcgggcgc  
 20701 gatatttga agtcgcagt ggggcctcc cctgcgcgc gcgagttgc atacacagg  
 20761 ttgcagcact ggaacactat cagcgccggg tgggtcacgc tggccagcac gctctgtc  
 20821 gagatcagat ccgcgtccg gtctccgcg ttgctcagg cgaacggagt caacttgg  
 20881 agctgcctt ccaaaaagg cgcgtgcca ggcttgagt tgcactcga ccgtagtgg  
 20941 atcaaaagg gaccgtgcc ggtctggcg ttaggataca gcgcctgcat aaaagcctg  
 21001 atctgctaa aagccacct agccttgcg cttcagaga agaacatgc gcaagactg  
 21061 ccggaaaact gattggcgg acaggccgc tegtgcacg agcacctgc tgcgtgtg  
 21121 gagatctgca ccacattcg gcccaccgg ttcttcacga tcttgccct gctagactg  
 21181 tcttcagcg cgcgtgccc gtttcgctc gtcacatcca ttcaatcac gtgctctta  
 21241 ttatcataa tgcttccgt tagacacta agctcgcctt cgatcagc gcagcgggtg  
 21301 agccacaac cgcagcccgt gggctcgtg tgctttagg tcacctctg aaacgactg  
 21361 aggtacgcct gcaggaatc ccccatcat gtcacaaag tctgtgtg ggtgaagtc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

21421 agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc cagagcttcc  
 21481 acttggtcag gcagtagttt gaagttcgcc ttagatcgt tatccacgtg gtacttgtcc  
 21541 atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg cacactcagc  
 21601 gggttcatca ccgtaatttc actttccgct tcgctgggct ctctctcttc ctcttgctc  
 21661 cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg ctacctcct  
 21721 ttgccatgct tgattagcac cgggtgggtg ctgaaaccca ccattttagt cgccacatct  
 21781 tctctttctt cctcgtctgc cagcattacc tctggtgatg gcgggcgctc gggcttggga  
 21841 gaagggcgct tcttttctt ctggggcgca atggccaaat ccgccgccga ggtcgatggc  
 21901 cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttctc gtctcggac  
 21961 tcgatacgcc gcctcatccg ctttttggg ggcgcccggg gaggcggcgg cgacggggac  
 22021 ggggacgaca cgtctccat ggttggggga cgtcgcgccg caccgcgtcc gcgctcgggg  
 22081 gtggttctgc gctgctctc tcccgaactg gccatttctt tctctatag gcagaaaaag  
 22141 atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt cgccaccacc  
 22201 gcctccaccg atgccgcaa cgcgcctacc acctccccg tcgaggcacc ccgcttgag  
 22261 gaggaggaag tgattatcga gcaggaccca ggtttttaa gcgaagacga cgaggaccgc  
 22321 tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa cgaggacaa  
 22381 gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga cgtgctgtg  
 22441 aagcatctgc agcgcagtg gcgcattatc tgcgacgctg tgcaagagcg cagcgatgtg  
 22501 cccctcgcca tagcggatgt cagccttgc tacgaacgcc acctattctc accgcgcgta  
 22561 ccccccaaac gccaaagaaa cggcacatgc gagcccaacc cgcgcctcaa ctctacccc  
 22621 gtatttgccg tgccagaggt gttgccacc tatcacatct tttccaaaa ctgcaagata  
 22681 cccctatctt gccgtgcaa cgcagccga gcggacaagc agctggcctt gcggcagggc  
 22741 gctgtcatac ctgatatcgc ctcgtcaac gaagtgccaa aaatcttga ggtcttga  
 22801 cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa tgaagtac  
 22861 tctggagtgt tgggtgaact cgagggtgac aacgcgcgcc tagcgtact aaaacgcagc  
 22921 atcgaggtca cccactttgc ctaccggca ctaacctac ccccaaggt catgagcaca  
 22981 gtcagtgtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc aaatttgcaa  
 23041 gaacaaacag aggagggcct acccgaggtt ggcgacgagc agctagcgcg ctggctcaa  
 23101 acgcgcgagc ctgccgactt ggaggagcga cgcaactaa tgatggccgc agtgctggt  
 23161 accgtggagc ttgagtgcac gcagcgggtc ttgctgacc cggagatgca gcgcaagcta  
 23221 gaggaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg caagatctcc  
 23281 aacgtggagc tctgcaacct ggtctctac ctggaattt tgcacgaaaa ccgccttggg  
 23341 caaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt ccgcgactgc  
 23401 gtttacttat ttctatgcta cactggcag acggccatgg gcgtttggca gcagtgttg  
 23461 gaggagtgc acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa ggacctatgg  
 23521 acggccttca acgagcgtc cgtggccgcg cactggcgg acatcattt cccgaacgc  
 23581 ctgcttaaaa cctgcaaca ggtctgcca gacttaccga gtcaaagcat gttgcagaac  
 23641 ttaggaact ttatcctaga gcgtcagga atcttcccgc ccactgctg tgcattctt  
 23701 agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgtttgggg cactgctac  
 23761 ctctgcagc tagccaacta cttgcctac cactctgaca taatggaaga cgtgagcgtt  
 23821 gacggtctac tggagtgtca ctgtcgtgc aacctatgca cccgcaccg ctccctggtt  
 23881 tgcaattcgc agctgcttaa cgaaagtcaa attatcggtt ctttgagct gcagggtccc  
 23941 tcgctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct tgggacgtcg  
 24001 gcttaccttc gaaatttgt acctgaggac taccagcccc acgagattag gttctacgaa  
 24061 gaccaatccc gcccgccaaa tgcggagctt accgcctgcg tcattaccca gggccacatt

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

24121 cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg aaagggacgg  
24181 ggggtttact tggaccccca gtccggcgag gagctcaacc caatccccc gccgccgag  
24241 ccctatcagc agcagccgag ggcccttgct tcccaggatg gcacccaaaa agaagctgca  
24301 gctgccgccc ccaccacagg acgaggagga atactgggac agtcaggcag aggaggtttt  
24361 ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg aagcttccga  
24421 ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattccct cgccggcgcc  
24481 ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gtcctcagg cgccgccggc  
24541 actgccggtt cgccgacca accgtatag ggacaccact ggaaccaggg ccggtaatc  
24601 caagcagccg ccgccgttag cccaagagca acaacagcg caaggctacc gctcatggcg  
24661 cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca tctcttcgc  
24721 ccgccgttt cttctctacc atcacggcgt ggccctccc cgtaacatcc tgcattacta  
24781 ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcggcagca acagcagcg  
24841 ccacacagaa gaaaggcga ccggtatgca agactctgac aaagcccaag aaatccacag  
24901 cggcggcagc agcaggagga ggagcgctgc gtctggcgcc caacgaacce gtatcgacce  
24961 gcgagcttag aaacaggatt ttcccactc tgtatgctat atttcaacag agcaggggccc  
25021 aagaacaaga gctgaaaata aaaaacagg cttctcgatc ctcacccgc agctgcctgt  
25081 atcacaaaag cgaagatcag cttcggcgca cgctggaaga cgcggagggt ctttcagta  
25141 aatactgcgc gctgactctt aaggactagt ttcgcgccct ttctcaaat taagcgcgaa  
25201 aactacgtca tctccagcgg ccacaccgg cgccagcacc tgcgtcagc gccattatga  
25261 gcaaggaaat tcccacgccc tacatgtgga gttaccagcc acaaatggga cttgcggctg  
25321 gagctgccc agactactca acccgaataa actacatgag cgcgggaccc cacatgatat  
25381 cccgggtcaa cggaatccgc gccaccgaa accgaattct cttggaacag gcggctatta  
25441 ccaccacacc tcgtaataac cttaatcccc gtagttggcc cgctgccctg gtgtaccagg  
25501 aaagtcccgc tcccaccact gtgtacttc ccagagacgc ccaggccgaa gttcagatga  
25561 ctaactcagg ggcgcagctt gcgggagggt ttgtcacag ggtgcggctg cccgggcagg  
25621 gtataactca cctgacaatc agaggcgag gtattcagct caacgacgag tcggtgagct  
25681 cctcgttgg tctccgtccg gacgggacat ttcagatcgg cggcgccggc cgtccttcat  
25741 tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc cttgagccg cgctctggag  
25801 gcattggaac tctgcaattt attgaggagt ttgtgccatc ggtctacttt aacccttct  
25861 cgggacctcc cgccactat ccggtatcaat ttattcctaa cttgacgcg gtaaaggact  
25921 cggcggacgg ctacgactga atgttaagt gagaggcaga gcaactgcgc ctgaaacacc  
25981 tggccactg tcgccccac aagtgtttt cccgcgactc cggtagattt tgctactttg  
26041 aattgcccga ggatcatatc gagggcccgg cgcacggcgt ccggttacc gccagggag  
26101 agcttgccc tagcctgatt cgggagtta cccagcgcgc cctgctagtt gagcgggaca  
26161 ggggaccctg tgttctact gtgatttga actgtcctaa ctttgatta catcaagatc  
26221 tttgtgcca tctctgtgt gagtataata aatacagaaa taaaatata ctggggctcc  
26281 tatgccatc ctgtaaacgc caccgtctc acccgcccaa gcaaccaag gcgaacctta  
26341 cctgtactt ttaacatctc tccctctgtg atttacaaca gtttcaacc agacggagt  
26401 agtctacgag agaacctctc cgagtcagc tactccatca gaaaaaacac caccctcct  
26461 acctgccggg aacgtacgag tgcgtaccg gccgtgcac cacacctacc gcctgaccgt  
26521 aaaccagact tttccggac agacctcaat aactctgtt accagaacag gaggtgagct  
26581 tagaaaaccc ttaggttatt aggccaaagg cgcagctact gtggggttta tgaacaattc  
26641 aagcaactct acgggctatt ctaattcagg ttctctaga aatggacgga attattacag  
26701 agcagcgct gctagaaaga cgcaggcgag cggccgagca acagcgcatg aatcaagagc  
26761 tccaagacat ggtaacttg caccagtga aaaggggtat cttttgtctg gtaaagcagg

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

26821 ccaaagtcac ctacgacagt aataccaccg gacaccgcct tagctacaag ttgccaacca  
 26881 agcgtcagaa attggtggc atggtgggag aaaagcccat taccataact cagcactcgg  
 26941 tagaaaccga aggtgcatt cactcacctt gtcaaggacc tgaggatctc tgcaccctta  
 27001 ttaagaccct gtgcggtctc aaagatctta ttccctttaa ctaataaaaa aaaataataa  
 27061 agcatcactt acttaaaatc agttagcaaa ttctgtcca gttattcag cagcacctcc  
 27121 ttgccctcct ccagctctg gtattgcagc ttctcctgg ctgcaaactt tctccacaat  
 27181 ctaaatggaa tgtcagttc ctctgttcc tgtccatccg caccactat ctcatgttg  
 27241 ttgcagatga agcgcgcaag accgtctgaa gatacctca acccgtgta tccatatgac  
 27301 acggaaaccg gtccccaac tgtgcctttt ctactctc ctttgtatc ccccaatggg  
 27361 ttcaagaga gtccccctgg ggtactctct ttgcgcctat ccgaacctct agttacctcc  
 27421 aatggcatgc ttgcgctcaa aatgggcaac ggcctctctc tggacgaggc cggcaacctt  
 27481 acctccaaa atgtaaccac tgtgagccca cctctcaaaa aaaccaagtc aaacataaac  
 27541 ctggaaatat ctgcaccct cactgtacc tcagaagccc taactgtggc tgccgccgca  
 27601 cctctaattg tcgggggcaa cacactcacc atgcaatcac agggcccgt aaccgtgcac  
 27661 gactccaaac ttagcattgc caccgaagga cccctcacag tgcagaagg aaagtagcc  
 27721 ctgcaaacat caggccccct caccaccacc gatagcagta cccttactat cactgcctca  
 27781 cccctctaa ctactgccac tggtagcttg ggcattgact tgaaagagcc catttataca  
 27841 caaaatggaa aactaggact aaagtacggg gctccttgc atgtaacaga cgacctaaac  
 27901 actttgaccg tagcaactgg tccaggtgtg actattaata atacttcctt gcaactaaa  
 27961 gttactggag cttgggttt tgaacacaa ggcaatatgc aactaatgt agcaggagga  
 28021 ctaaggattg atttcaaaa cagacgcct atacttgatg ttagttatcc gttgatgt  
 28081 caaaaccaac taaatctaag actaggacag ggcctcttt ttataaactc agcccacaac  
 28141 ttggatatta actacaacaa aggcctttac ttgtttacag ctcaaacaa ttccaaaaag  
 28201 cttgaggta acctaagcac tgccaagggg ttgatgttg acgtacagc catagccatt  
 28261 aatgcaggag atgggcttga atttggttca ctaatgcac caaacacaaa tcccctcaa  
 28321 acaaaaattg gccatggcct agaatttgat tcaacaagg ctatggttcc taaactagga  
 28381 actggcctta gtttgacag cacaggtgcc attacagtag gaaacaaaa taatgataag  
 28441 ctaactttgt ggaccacacc agtccatct cctaactgta gactaaatgc agagaaagat  
 28501 gctaaactca ctttggtctt aacaaaatgt ggcagtcaaa tacttgctac agtttcagt  
 28561 ttggtgtta aaggcagttt ggctccaata tctggaacag ttcaaagtgc tcattctatt  
 28621 ataagattg acgaaaatgg agtgctacta acaattcct tctggaccc agaatttgg  
 28681 aactttagaa atggagatct tactgaaggc acagcctata caaacgctgt tggatttatg  
 28741 cctaacctat cagcttatcc aaatctcac ggtaaaactg ccaaaagtaa cattgtcagt  
 28801 caagtttact taaacggaga caaaactaaa cctgtaacac taaccattac actaaacggt  
 28861 acacaggaaa caggagacac aactccaagt gcatactcta tgcattttc atgggactgg  
 28921 tctggccaca actacattaa tgaaatattt gccacatcct cttaacttt ttcatacat  
 28981 gcccaagaat aaagaatcgt ttgtgtatg ttcaacgtg ttatttttc aattgcagaa  
 29041 aatttgaat cattttcat tcagtagtat agcccacca ccacatagct tatacagatc  
 29101 accgtacctt aatcaaactc acagaacctt agtattcaac ctgccacct cctcccaaca  
 29161 cacagatgac acagtcttt cccccggct ggccttaaaa agcatcatat catgggtaac  
 29221 agacatatc ttaggtgtta tattccacac gtttctgt cgagccaaac gctcatcagt  
 29281 gatattaata aactccccgg gcagctcact taagttcatg tcgctgtcca gctgctgagc  
 29341 cacaggctgc tgtccaactt gcggttgctt aacgggaggc gaaggagaag tccacgccta  
 29401 catgggggta gattcataat cgtgcatcag gataggcggt tgggtgtgca gcagcgcgcg  
 29461 aataaactgc tgccgccgcc gctccgtcct gcaggaatac aacatggcag tggctcctc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

29521 agc gat gatt cgc acc gccc gcag cataag ggc ctt gtc ctcc ggg cac agc agc gcac  
 29581 cct gat cta cttaa tcag cac agt aact gcag cac agc acc aca atat tgt caa aat  
 29641 ccc acag tgc aagg cgt gt atcc aaag ct cat ggc ggg acc acaga ac ccac gtgg cc  
 29701 atcata ccac aag cgc aggt agatta agtg gcg accc ct ataa acac gc tgg acataaa  
 29761 catt acctct ttgg catgt tgta attcac cacct cccgg tacca tataa acct ctgatt  
 29821 aaac atggcg ccat ccacca ccat cctaaa ccag ctggcc aaa acctgcc cgc cggctat  
 29881 aact gcagg gaacc gggac tgga acaatg acagt ggaga gccc aggact cgta accatg  
 29941 gat catcatg ctg tcatga tatca atgtt ggc acaac ac aggc acacgt gcata cactt  
 30001 cctc aggatt aca agctcct ccc gcgttag aacc atatcc cagg gaacaa ccc attcctg  
 30061 aatc agcgt aatccc acac tgc aggg aag acct gcacg taact cacgt tgt cattgt  
 30121 caa agtg tta cattc gggca gcag cggatg atcct ccagt atg gtagc gc ggtttctgt  
 30181 ctcaaa agga ggtag acgat cctact gta cgg agtgcgc cgag acaacc gagatcgtgt  
 30241 tgg tctagt gtc atgccaa atgga acgcc ggac gtagt atatttctg aagcaaaacc  
 30301 aggt gcgggc gtg acaaa ca gatctgcgtc tcc ggtctcg ccgcttagat cgctctgtgt  
 30361 agtagttgta gtata ccac tctctaaa catcc aggcg cccctggct tgggttcta  
 30421 tgtaaa ctcc ttc atgcgcc gctgccctga taac atccac cacc gcagaa taagccacac  
 30481 ccagccaacc tacac attcg tctgcgagt cacacacggg agg agcggga agagctggaa  
 30541 gaac catgtt ttttttta ttcaaaa aga ttatcc aaaa cctcaaaatg aagatctatt  
 30601 aagt gaacgc gtc cccctcc ggtggcgtgg tcaa actcta cagcca aaga acagataatg  
 30661 gcattt gtaa gatgtgcac aatggctcc aaaagg caaa cggccctcac gtccaagtgg  
 30721 acgtaaaagg taaaccctc aggtgtaate tctctataa acattccagc acctcaacc  
 30781 atgccccaat aattctc atc tgcacctt ctcaatata ctctaagcaa atcccgaa  
 30841 ttaagtccg ccattgtaaa aatctgctcc agagcgcct ccacctcag cctcaagcag  
 30901 cgaatcatga ttgcaaaaat tcagg ttcct cacagacctg tataagattc aaaagcggaa  
 30961 cattaacaaa aataccgca tccgtaggt ccttcgcag ggccagctga acataatcgt  
 31021 gcaggtctgc acggaccagc gcggccact cccgccagg aacctgaca aaagaacca  
 31081 cactgattat gacacgcata ctggagcta tgtaaccag cgtagccccg atgtaagctt  
 31141 tgttgcattg gcggcgatat aaaatgcaag gtgctgctca aaaaatcagg caaagcctcg  
 31201 cgcaaaaaag aaagcacatc gtagtcatgc tcatgcagat aaaggcaggt aagctccgga  
 31261 accaccacag aaaaagacac cattttctc tcaaacatgt ctgcgggtt ctgcataaac  
 31321 acaaaataaa ataacaaaaa aacatttaa cattagaagc ctgtcttaca acaggaaaaa  
 31381 caacccttat aagcataaga cggactacgg ccatgccggc gtgaccgtaa aaaaactggt  
 31441 caccgtgatt aaaaagcacc accgacagct cctcggctat gtccggagtc ataagtgaag  
 31501 actcggtaaa cacatcaggt tgattcacat cggtcagtgc taaaaagcga ccgaaatagc  
 31561 ccggggggaat acataccgc aggcgtagag acaacattac agccccata ggaggtataa  
 31621 caaaattaat aggagagaaa aacacataaa cacctgaaaa accctcctgc ctaggcaaaa  
 31681 tagcaccctc ccgtccaga acaacataca gcgttccac agcggcagcc ataacagtca  
 31741 gccttaccag taaaaaagaa aacctattaa aaaaacacca ctgcacagg caccagctca  
 31801 atcagtcaca gtgtaaaaaa gggccaagtg cagagcgagt atatatagga ctaaaaaatg  
 31861 acgtaacggt taaagtccac aaaaacacc cagaaaaccg cagcgaacc tacgccaga  
 31921 aacgaaagcc aaaaaccca caactctc aaatcgtcac ttcggtttc ccacgttacg  
 31981 tcaactccca ttttaagaaa actacaattc ccaacacata caagttactc cgccctaaa  
 32041 cctacgtcac ccgcccgtt cccacgccc gcgccacgtc aaaaactcca cccctcatt  
 32101 atcatattgg cttaaccca aaataaggta tattattgat gatgtaatt aatttaaatc  
 32161 cgcatgcgat atcagctct cccgggaatt cgcatctgc acgcagggt ggatggcctt

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

32221 cccattatg attcttctcg cttccggcgg catcgggatg cccgcgttgc aggccatgct  
32281 gtccaggcag gtagatgacg accatcaggg acagcttcac ggccagcaaa aggccaggaa  
32341 ccgtaaaaag gccgcgttgc tggcggtttt ccataggctc cgccccctg acgagcatca  
32401 caaaaatcga cgctcaagtc agaggtggcg aaaccgcaca ggactataaa gataccaggc  
32461 gttccccct ggaagctccc tcgtgcgctc tctgttccg accctgccgc ttaccggata  
32521 cctgtccgcc ttctccctt cgggaagcgt ggcgctttct caatgctcac gctgtaggta  
32581 tctcagttcg gtgtagtcg ttgcctcaa gctgggctgt gtgcacgaac cccccgtca  
32641 gcccagccgc tgcgccttat ccgtaacta tcgtcttgag tccaaccgg taagacacga  
32701 cttatcgcca ctggcagcag cacttggtaa caggattagc agagcgaggt atgtaggcgg  
32761 tgctacagag ttcttgaagt ggtggcctaa ctacggctac actagaagga cagtatttgg  
32821 tatctgcgt ctgctgaagc cagttacctt cggaaaaaga gttgtagct ctgtatccgg  
32881 caaacaacc accgctggta gcggtggtt tttgtttgc aagcagcaga ttacgcgcag  
32941 aaaaaaagga tctcaagaag atccttggat ctttctacg ggtctgacg ctacgtggaa  
33001 cgaaaactca cgtaaggga tttggtcat gagattatca aaaaggatct tcacctagat  
33061 ccttttaaat caatctaaag tatatatgag taaacttgg ctgacagta ccaatgctta  
33121 atcagtgagg cacctatctc agcagatctgt ctatttcgt catccatagt tgcctgactc  
33181 cccgtcgtgt agataactac gatacgggag ggcttaccat ctggccccag tgctgcaatg  
33241 ataccgcgag acccacgctc accggctcca gatttatcag caataaacca gccagccgga  
33301 agggccgagc gcagaagtgg tctgcaact ttatccgct ccatccagtc tattaattgt  
33361 tgccgggaag ctagagtaag tagtcgcca gtaaatagtt tgcgcaacgt tgttgccatt  
33421 gntgcaggca tcgtggtgac acgctcgtcg tttggtatgg ctccattcag ctccggttcc  
33481 caacgatcaa ggcgagttac atgatcccc atgttgtgca aaaaagcgg tagctccttc  
33541 ggtcctccga tcgtgtcag aagtaagttg gccgcagtgt taccactcat gggtatggca  
33601 gcactgcata attctcttac tgcatgcca tccgtaagat gctttctgt gactggtgag  
33661 tactcaacca agtcattctg agaatagtgt atgcggcgac cgagttgctc ttgccggcg  
33721 tcaacacggg ataataccgc gccacatagc agaactttaa aagtgtcat cattggaaaa  
33781 cgttcttcgg ggcgaaaact ctcaaggatc ttaccgctgt tgagatccag ttcatgtaa  
33841 cccactcgtg caccactg atcttcagca tctttactt tcaccagcgt ttctgggtga  
33901 gcaaaaacag gaaggcaaaa tggcgcaaaa aagggaataa gggcgacacg gaaatgttga  
33961 atactcatc tcttctttt tcaatattat tgaagcatt atcagggtta ttgtctcatg  
34021 agcggataca tatttgaatg tatttagaaa aataaaciaa taggggttcc gcgcacattt  
34081 ccccgaaaag tgccacctga cgtctaagaa accattatta tcatgacatt aacctataa  
34141 aataggcgta tcacgagggc ctttctctt caaggatccg aattccggg agagctcgat  
34201 atcgcacgac gatttaatt aattaa

Please amend Table 9 on page 375 as follows:

Table 9: Nucleotide sequence of a Sau3A fragment used to construct vectors comprising suppressor tRNA sequences (SEQ ID NO: 86).

```
1  ctagaggatc gaaaccatcc tctgctatat ggccgcatat attttacttg aagactagga
61  ccctacagaa aaggggtttt aaagtaggcg tgctaaacgt cagcggacct gacccgtgta
121 agaatccaca aggtatcctg gtggaaatgc gcatttgtag gcttcaatat ctgtaatcct
181 actaattagg tgtggagagc tttcagccag tttcgtaggt ttggagacca tttagggggt
241 ggcgtgtggc cccctcgtaa agtccttcgt acttcctaca tcagacaagt cttgcaattt
301 gcaatatctc ttttagccaa tatctaaatc tttaaaattt tgattttggt ttttaaccag
361 gatgagagac attccagagt tgttaccttg tcaaaataaa caaatttaaa gatgtctgtg
421 aaaagaaaca tatattcctc atgggaatat atccagggtg ttgaaggagg tacactcgag
481 tctccctatc agtgatagag atctcgaggt cgtagtcgtg gccgagtggg taaggcgatg
541 gactctaaat ccattggggg ctccccgcgc aggttcgaat cctgccgact acggcgtgct
601 ttttttactc tcgggtagag gaaatccggg gcactacctg tgcaatcaca cagaataaca
661 tggagtagta ctttttattt tcctgttatt atctttctcc ataaaagtgg aaccagataa
721 ttttagttct tttgtgtaac aagactagag attttttgaa gtgttacatt ggaaagcact
781 tgaaaacaca agtaatttct gacactgcta taaaaatgat ggaaaaacgc tcaagttggt
841 ttgcctttca gtcttcttga aatgctgtct ccctatctga aatccagctc acgtctgact
901 tccaaaaccg tgcttgccct taacttatgg aataaatatc tcaaacagat cccc
```

Please amend Table 10 on pages 376-384 as follows:

Table 10: Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

```
CATCATCAATAATATACCTTATTTTGGATTGAAGCCAATATGATAATGAGGGGGTGGAGTTTGTGACGTG
GCGCGGGGCGTGGGAACGGGGCGGGTGACGTAGTAGTGTGGCGGAAGTGTGATGTTGCAAGTGTGGCGGA
ACACATGTAAGCGACGGATGTGGCAAAAGTGACGTTTTTGGTGTGCGCCGGTGTACACAGGAAGTGACAA
TTTTTCGCGCGGTTTTAGGCGGATGTTGTAGTAAATTTGGGCGTAACCGAGTAAGATTTGGCCATTTTCGC
GGGAAACTGAATAAGAGGAAGTGAAATCTGAATAATTTTGTGTTACTCATAGCGCGTAATATTTGTCTA
GGGCCGCGGGGACTTTGACCGTTTACGTGGAGACTCGCCAGGTGTTTTTCTCAGGTGTTTTCCGCGTTC
CGGGTCAAAGTTGGCGTTTTATTATTATAGTCAGTCGAAGCTTGGATCCGGTACCTCTAGAATTCTCGAG
CGGCCGCTAGCGACATCGATCACAGTTTGTACAAAAAGCTGAACGAGAAACGTAAAATGATATAAAATA
TCAATATATTAAATTAGATTTTGCATAAAAAACAGACTACATAATACTGTAAAACACAACATATCCAGTC
ACTATGGCGGCCGCATTAGGCACCCCCAGGCTTTACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTT
TGAGTTAGGATCCGGCGAGATTTTCAGGAGCTAAGGAAGCTAAAATGGAGAAAAAAATCACTGGATATAC
CACCGTTGATATATCCCAATGGCATCGTAAAGAACATTTTGAGGCATTTTCAGTCAGTTGCTCAATGTACC
TATAACCAGACCGTTTCAGCTGGATATTACGGCCTTTTTTAAAGACCGTAAAGAAAAATAAGCACAGTTT
ATCCGGCCTTTATTACATTCTTGCCCGCTGATGAATGCTCATCCGGAATTCGTATGGCAATGAAAGA
CGGTGAGCTGGTGATATGGGATAGTGTTACCCCTTGTTACACCGTTTTCCATGAGCAAACTGAAACGTTT
TCATCGCTCTGGAGTGAATACCACGACGATTTCCGGCAGTTTCTACACATATATTCGCAAGATGTGGCGT
GTTACGGTGAAAACCTGGCCTATTTCCTAAAGGGTTTATTGAGAATATGTTTTTCGTCTCAGCCAATCC
CTGGGTGAGTTTACCAGTTTGTATTAAACGTGGCCAATATGGACAACCTCTTCGCCCCCGTTTTCCACC
ATGGGCAAATATTATACGCAAGGCGACAAGGTGCTGATGCCGCTGGCGATTTCAGGTTCATCATGCCGTCT
GTGATGGCTTCCATGTGCGCAGAATGCTTAATGAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGGC
GTAAACGCGTGGATCCGGCTTACTAAAAGCCAGATAACAGTATGCGTATTTGCGCGCTGATTTTTCGGT
ATAAGAATATATACTGATATGTATACCCGAAGTATGTCAAAAAGAGGTGTGCTATGAAGCAGCGTATTAC
AGTGACAGTTGACAGCGACAGCTATCAGTTGCTCAAGGCATATATGATGTCAATATCTCCGGTCTGGTAA
GCACAACCATGCAGAATGAAGCCCGTCGTCTGCGTGCCGAACGCTGGAAGCGGAAATCAGGAAGGGAT
GGCTGAGGTGCGCCCGTTTATTGAAATGAACGCTCTTTTGCTGACGAGAACAGGGACTGGTGAATGCA
GTTTAAGGTTTACACCTATAAAAGAGAGAGCGCTTATCGTCTGTTTGTGGATTGACAGAGTATATTAT
GACACGCCCCGGGCGACGGATGGTGATCCCCCTGGCCAGTGCACGTCTGCTGTGAGATAAAGTCTCCGTG
AACTTTACCCGGTGGTGCATATCGGGGATGAAAGCTGGCGCATGATGACCACCGATATGGCCAGTGTGCC
GGTCTCCGTTATCGGGGAAGAAAGTGGCTGATCTCAGCCACCGCGAAAATGACATCAAAAACGCCATTAAC
CTGATGTTCTGGGGAATATAAATGTCAGGCTCCGTTATACACAGCCAGTCTGCAGGTCGACCATAGTGAC
TGGATATGTTGTGTTTTACAGTATTATGTAGTCTGTTTTTTATGCAAAATCTAATTTAATATATTGATAT
TTATATCATTTTACGTTTCTCGTTTCAGCTTTCTTGTACAAAGTGGTGATCGATTTCGACAGATCACTGAAA
TGTGTGGGCGTGGCTTAAGGGTGGGAAAGAATATATAAGGTGGGGTCTTATGTAGTTTTGTATCTGTTT
TGCAGCAGCGCCCGCCCGCATGAGCACCAACTCGTTTGTATGGAAGCATTGTGAGCTCATATTTGACAACG
CGCATGCCCCCATGGGCGGGGTGCGTCAGAAATGTATGGGCTCCAGCATTTGATGGTCCGCCGCTCCCTGC
CCGCAAACTCTACTACCTTGACCTACGAGACCGGTGCTGGAACGCCGTTGGAGACTGCAGCCTCCGCGC
CGCTTCAGCCGCTGCAGCCACCGCCCGCGGGATTGTGACTGACTTTGCTTTCCTGAGCCCGCTTGCAAGC
AGTGACGCTTCCCGTTTCATCCGCCCGCATGACAAGTTGACGGCTCTTTTGGCACAATTGGATTCTTTGA
CCCGGGAACCTTAATGTCGTTTCTCAGCAGCTGTTGGATCTGCGCCAGCAGGTTTCTGCCCTGAAGGCTTC
CTCCCCCTCCCAATGCGGTTTAAAAACATAAAATAAAAAACCAGACTCTGTTTGGATTTGGATCAAGCAAGTG
TCTTGCTGTCTTTATTTAGGGGTTTTGC GCGCGCGGTAGGCCGGGACCAGCGGTCTCGGTGTTGAGGG
TCCTGTGTATTTTTCCAGGACGTGGTAAAGGTGACTCTGGATGTTTCAGATACATGGGCATAAGCCCGTC
TCTGGGTGGAGGTAGCACCACCTGCAGAGCTTCATGCTGCGGGTGGTGTGTGTAGATGATCCAGTCGTAG
CAGGAGCGCTGGGCGTGGTGCTTAAAGATGCTTATGCAAGCTGATTGCCAGGGCAGGCCCTTGG
TGTAAGTGTTTACAAAGCGGTAAAGCTGGGATGGGTGCATACGTGGGGATATGAGATGCATCTTGGACTG
TATTTTTAGGTTGGCTATGTTCCAGCCATATCCCTCCGGGGATTTCATGTTGTGCAGAACCACAGCACA
GTGTATCCGGTGCACCTTGGGAAATTTGTCATGTAGCTTAGAAGGAAATGCGTGGAAGAACTTGGAGACGC
CCTTGTGACCTCCAAGATTTTCCATGCATTCGTCCATAATGATGGCAATGGGCCCACGGGCGGCGGCTG
GGCGAAGATATTTCTGGGATCACTAACGTCAAGTTGTGTTCCAGGATGAGATCGTCATAGGCCATTTTT
ACAAAGCGCGGGCGGAGGGTGCCGAGCTGCGGTATAATGGTTCCATCCGGCCCAGGGGCGTAGTTACCTT
CACAGATTTGCATTTCCACGCTTTGAGTTTCAGATGGGGGGATCATGTCTACCTGCGGGGCGATGAAGAA
AACGTTTTCCGGGTAGGGGAGATCAGCTGGGAAGAAAGCAGGTTCTTGAGCAGCTGCGACTTACCGCAG
CCGGTGGGCCCCGTAAATCACACCTATTACCGGTGCAACTGGTAGTTAAGAGAGCTGCAGCTGCCGTCAT
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Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

CCCTGAGCAGGGGGCCACTTCGTTAAGCATGTCCTGACTCGCATGTTTTCCCTGACCAAATCCGCCAG  
AAGGCGCTCGCCGCCAGCGATAGCAGTTCTTGCAAGGAAGCAAAGTTTTTCAACGGTTTGAGACCGTCC  
GCCGTAGGCATGCTTTTGAGCGTTTGACCAAGCAGTTCCAGGCGGTCCCACAGCTCGGTACCTGCTCTA  
CGGCATCTCGATCCAGCATATCTCCTCGTTTCGCGGGTTGGGGCGGCTTTCGCTGTACGGCAGTAGTCGG  
TGCTCGTCCAGACGGGCCAGGGTCATGTCTTCCACGGGCGCAGGGTCCTCGTCAGCGTAGTCTGGGTCA  
CGGTGAAGGGGTGCGCTCCGGGCTGCGCGCTGGCCAGGGTGCCTTGAGGCTGGTCTGCTGGTGCTGAA  
GCGCTGCCGGTCTTTCGCCCTGCGCGCTCGGCCAGGTAGCATTGACCATGGTGTCTAGTCCAGCCCCCTCC  
GCGCGTGGCCCTTGGCGCGCAGCTTGCCCTTGAGGAGGCGCGCACGAGGGGCAGTGCAGACTTTTGA  
GGGCGTAGAGCTTGGGCGCGAGAAATACCGATTCCGGGGAGTAGGCATCCGCGCCGAGGCCCCGAGAC  
GGTCTCGCATTCCACGAGCCAGGTGAGCTCTGGCCGTTCCGGGGTCAAAAACCAGGTTTCCCCATGCTTT  
TTGATGCGTTTCTTACCTCTGGTTTCCATGAGCCGGTGTCCACGCTCGGTGACGAAAAGGCTGTCCGTGT  
CCCCGTATACAGACTTGAGAGGCCTGTCTCGAGCGGTGTTCCGCGGTCTCTCTGTATAGAACTCGGA  
CCACTCTGAGACAAAGGCTCGCGTCCAGGCCAGCACGAAGGAGGCTAAGTGGGAGGGGTAGCGGTCTGTG  
TCCACTAGGGGGTCCACTCGCTCCAGGGTGTGAAGACACATGTCGCCCTCTTCCGCATCAAGGAAGGTGA  
TTGGTTTGTAGGTGTAGGCCACGTGACCGGGTGTTCCTGAAGGGGGGTATAAAAGGGGGTGGGGGCGCG  
TTCGTCTCTACTCTCTTCCGCATCGTGTCTGCGAGGGCCAGCTGTTGGGGTGAAGTACTCCCTCTGAAA  
GCGGCATGACTTCTGCGCTAAGATTGTCAAGTTTCCAAAAACGAGGAGGATTGATATTACCTGGCCCCG  
CGGTGATGCTTTTGGGGTGGCCGCATCCATCTGGTTCAGAAAAGACAATCTTTTTGTTGTCAAGCTTGGT  
GGCAAACGACCCGTAGAGGGCGTTGGACAGCAACTTGGCGATGGAGCGCAGGGTTTGGTTTTTGTGCGCA  
TCGGCGCGCTCCTTGGCCGCGATGTTAGTCTGCAGTATTTCGCGCGCAACGCACCGCCATTCCGGAAAGA  
CGGTGGTGCCTCGTCCGGCACCAGGTGCACGCGCAACCGCGGTTGTGCAGGGTGACAAGGTCAACGCT  
GGTGGCTACCTCTCCGCGTAGGCGCTCGTTGGTCCAGCAGAGGCGGCCCTTTCGCGGAGCAGAATGGC  
GGTAGGGGGTCTAGCTGCGTCTCGTCCGGGGGGTCTGCGTCCACGGTAAAGACCCCGGGCAGCAGGCGCG  
CGTCGAAGTAGTCTATCTTGCAAGTCTAGCGCTGCTGCCATGCGCGGGCAGGCAAGCGCGCG  
CTCGTATGGTTGAGTGGGGGACCCCATGGCATGGGTGGGTGAGCGCGGAGGCGTACATCCCGCAAATG  
TCGTAAACGTAGAGGGGCTCTCTGAGTATTCCAAGATATGTAGGGTAGCATCTTCCACCGCGGATGCTGG  
CGCGCACGTAATCGTATAGTTCTGTGCGAGGGAGCGAGGAGGTCCGGACCGAGGTTGCTACGGGCGGGCTG  
CTCTGCTCGGAAGACTATCTGCCTGAAGATGGCATGTGAGTTGGATGATATGGTTGGACGCTGGAAGACG  
TTGAAGCTGGCGTCTGTGAGACCTACCGCGTCACGCACGAAGGAGGCGTAGGAGTCCGCGAGCTTGTGTA  
CCAGCTCGGCGGTGACCTGCACGTCTAGGGCGCAGTAGTCCAGGGTTTCTTGTATGATGTACACTTATC  
CTGTCCCTTTTTTTTCCACAGCTCGCGGTGAGGACAAACTCTTCGCGGTCTTTCAGTACTCTTGGATC  
GGAAACCCGTCCGCCTCCGAACGGTAAGAGCCTAGCATGTAGAAGTGGTTGACGGCCTGGTAGGCGCAGC  
ATCCCTTTTCTACGGGTAGCGCGTATGCCTGCGCGGCTTCCGGAGCGAGGTGTGGGTGAGCGCAAGGT  
GTCCCTGACCATGACTTTGAGGTACTGTTTGAAGTCAGTGTCTGTCGCATCCGCCCTGCTCCAGAGC  
AAAAAGTCCGTGCGCTTTTGGAAACGCGGATTTTGAAGGCGAAGGTGACATCGTTGAAGAGTATCTTTT  
CCGCGCGAGGCATAAAGTTGCGTGTGATGCGGAAGGGTCCCGGCACCTCGGAACGGTTGTTAATTACCTG  
GGCGGCGAGCACGATCTCGTCAAAGCCGTTGATGTTGTGGCCACAATGTAAAGTTCCAAGAAGCGCGGG  
ATGCCCTTGATGGAAGGCAATTTTTTAAGTTCCTCGTAGGTGAGCTCTTCAGGGGAGCTGAGCCCGTGTCT  
CTGAAAGGGCCAGTCTGCAAGATGAGGGTTGGAAGCGACGAATGAGCTCCACAGGTACAGGGCCATTAG  
CATTTGCAGGTGGTTCGCGAAAGGTCTTAAACTGGCGACCTATGGCCATTTTTTCTGGGGTGATGCAGTAG  
AAGGTAAGCGGGTCTTGTTCACAGCGGTCCCATCCAAGGTTTCGCGGCTAGGTCTCGCGCGGCAGTCACTA  
GAGGTCTCATCTCCGCCGAACCTTCATGACCAGCATGAAGGGCACGAGCTGCTTCCCAAAGGCCCCCATCCA  
AGTATAGGTCTCTACATCGTAGGTGACAAAGAGACGCTCGGTGCGAGGATGCGAGCCGATCGGGAAGAAC  
TGGATCTCCCGCCACCAATTGGAGGAGTGGCTATTGATGTGGTGAAGTAGAAGTCCCTGCGACGGGCGG  
AACACTCGTGCTGGCTTTTGTAAAAACGTGCGCAGTACTGGCAGCGGTGCACGGGCTGTACATCTTCAC  
GAGGTTGACCTGACGACCGCGCACAAAGGAAGCAGAGTGGGAATTTGAGCCCTCGCTGGCGGGTTTGGC  
TGGTGGTCTTCTACTTCGGCTGCTTGTCTTACCGTCTGGCTGCTCGAGGGGAGTTACGGTGGATCGGA  
CCACCACGCGCGCGAGCCCCAAAGTCCAGATGTCCGCGCGCGGCGGTTCGAGCTTGATGACAACATCGCG  
CAGATGGGAGCTGTCCATGGTCTGGAGCTCCCGCGGCGTCAGGTACAGCGGGAGCTCCTGCAGGTTTACC  
TCGCATAGACGGGTGAGGGCGCGGGCTAGATCCAGGTGATACCTAATTTCCAGGGGCTGGTTGGTGGCGG  
CGTCGATGGCTTGAAGAGGCGCATCCCCGCGCGCGACTACGGTACCGCGCGGCGGGCGGTGGGCCG  
GGGGGTGCTCTTGGATGATGCATCTAAAAGCGGTGACGCGGGCGAGCCCCGAGGTAGGGGGGGCTCCG  
GACCCGCGGGGAGAGGGGGCAGGGGCACGTGCGCGCGCGCGCGGGCAGGAGCTGGTGTGCGCGCTAG  
GTTGCTGGCGAACGCGACGACGCGGCGGTTGATCTCTGAATCTGGCGCCTCTGCGTGAAGACGACGGGC  
CCGGTGAGCTTGAGCTGAAAGAGAGTTCGACAGAATCAATTCGGTGTCTGTTGACGGCGGCTGGCGCA

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

AAATCTCTGCACGTCTCCTGAGTTGTCTTGATAGGCGATCTCGGCCATGAACTGCTCGATCTCTTCCTC  
CTGGAGATCTCCGCTCCGGCTCGCTCCACGGTGGCGGCGAGGTCTGTTGAAATGCGGGCCATGAGCTGC  
GAGAAGGCGTTGAGGCCTCCCTCGTTCCAGACGCGGTGTAGACCACGCCCCCTTCGGCATCGCGGGCGC  
GCATGACCACCTGCGCGAGATTGAGCTCCACGTGCCGGGCGAAGACGCGGTAGTTTCGCAGGCGCTGAAA  
GAGGTAGTTGAGGGTGGTGGCGGTGTGTTCTGCCACGAAGAAGTACATAACCCAGCGTCGCAACGTGGAT  
TCGTTGATATCCCCAAGGCCTCAAGGCGCTCCATGGCCTCGTAGAAGTCCACGGCGAAGTTGAAAACT  
GGGAGTTGCGCGCCGACACGGTTAACTCCTCCTCCAGAAGACGGATGAGCTCGGCGACAGTGTGCGGCAC  
CTGACCGCTCAAAGGCTACAGGGGCTCTTCTTCTTCTCAATCTCCTCTTCCATAAGGGCCTCCCTTCT  
TCTTCTTCTGGCGGCGGTGGGGGAGGGGGACACGGCGGCGACGACGGCGCACCGGGAGGCGGTTCGACAA  
AGCGCTCGATCATCTCCCCGCGGCGACGGCGCATGGTCTCGGTGACGGCGCGGCCGTTCTCGCGGGGGCG  
CAGTTGGAAGACGCCGCCGTCATGTCCCGGTTATGGGTGGCGGGGGCTGCCATGCGGCAGGGATACG  
GCGCTAACGATGCATCTCAACAATTGTTGTGTAGGTACTCCGCCGCCGAGGGACCTGAGCGAGTCCGCAT  
CGACCGGATCGGAAAACCTCTCGAGAAAGGCGTCTAACAGTACAGTCGCAAGGTAGGCTGAGCACCGT  
GGCGGGCGGCGAGCGGGCGGCGGTTCGGGGTGTCTTCTGGCGGAGGTGCTGCTGATGATGTAATTAAGTAG  
GCGGTCTTGAGACGGCGGATGGTCGACAGAAGCACCATGTCTTGGGTCCGGCCTGCTGAATGCGCAGGC  
GGTTCGGCCATGCCCCAGGCTTCGTTTGTGACATCGGCGCAGGTCTTTGTAGTAGTCTTGCATGAGCCTTTC  
TACCGGCACTTCTTCTCTCCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT  
TTTGCCCGTAGGTGGCGCCCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT  
CTAGGTTCGGCGACAACGCGCTCGGCTAATATGGCCTGCTGCACCTGCGTGAGGGTAGACTGGAAGTCATC  
CATGTCCACAAAGCGGTGGTATGCGCCCGTGTGATGGTGTAAAGTGCAGTTGGCCATAACGGACCAGTTA  
ACGGTCTGGTGACCCGGCTGCGAGAGCTCGGTGTACCTGAGACGCGAGTAAGCCCTCGAGTCAAATACGT  
AGTCGTTGCAAGTCCGCACCAGGTACTGGTATCCACCAAAAAGTGCGGCGGCGGCTGGCGGTAGAGGGG  
CCAGCGTAGGGTGGCCGGGGCTCCGGGGGCGAGATCTTCCAACATAAGGCGATGATATCCGTAGATGTAC  
CTGGACATCCAGGTGATGCCGGCGGCGGTGGTGGAGGCGCGGAAAGTCCGCGACGCGGTTCCAGATGT  
TGCGCAGCGGCAAAAAGTGCTCCATGGTTCGGGACGCTCTGGCCGTCAGGCGCGCGCAATCGTTGACGCT  
CTAGACCGTGCAAAAGGAGAGCCTGTAAAGCGGGCACTCTTCCGTGGTCTGGTGGATAAAATCGTGAAGGT  
ATCATGGCGGACGACCGGGGTTTCGAGCCCCGTATCCGGCCGTCCGCCGTGATCCATGCGGTTACCGCCCCG  
CGTGTCGAACCCAGGTGTGCGACGTCAGACAACGGGGAGTGCTCCTTTTGGCTTCTTTCAGGCGCGGC  
GGCTGCTGCGCTAGCTTTTTCGGCACTGGCCGCGCGCAGCGTAAGCGGTTAGGCTGGAAAGCGAAAGCA  
TTAAGTGGCTCGCTCCCTGTAGCCGAGGGTTATTTTCCAAGGTTGAGTCGCGGGACCCCCGGTTCGAG  
TCTCGGACCGGCGGACTGCGGCGAACGGGGTTTGCCTCCCCGTATGCAAGACCCCGCTTGCAAAATTC  
CTCCGGAACAGGGACGAGCCCCCTTTTTCGCTTTTTCAGATGCATCCGGTGCTGCGGCAGATGCGCCCC  
CCTCCTCAGCAGCGCAAGAGCAAGAGCAGCGGCAGACATGCAGGGCACCCCTCCCTCCTACCGCGT  
CAGGAGGGGCGACATCCGCGGTTGACGCGGCAGCAGATGTTGATTACGAACCCCGCGCGCGCGGCGGCG  
GCACTACCTGGACTTGGAGGAGGGCGAGGGCTTGGCGCGCTAGGAGCGCCCTCTCCTGAGCGGTACCCA  
AGGGTGCAGCTGAAGCGTGATACGCGTGAGGCGTACGTGCCGCGGCGAAGCTGTTTCGCGACCGCGAGG  
GAGAGGAGCCCGAGGAGATGCGGGATCGAAAGTTCCACGCAGGGCGCGAGCTGCGGCATGGCCTGAATCG  
CGAGCGGTTGCTGCGCGAGGAGGACTTTGAGCCCGACGCGCAACCGGGATTAGTCCCGCGCGCGCACAC  
GTGGCGGCGCGGACCTGGTAACCGCATACGAGCAGACGGTGAACCAGGAGATTAACTTTCAAAAAAGCT  
TTAACAACACGTGCGTACGCTTGTGGCGCGGAGGAGGTGGCTATAGGACTGATGCATCTGTGGGACTT  
TGTAAGCGCGCTGGAGCAAAACCCAAATAGCAAGCCGCTCATGGCGCAGCTGTTTCTTATAGTGCAGCAC  
AGCAGGGACAACGAGGCATTCAGGGATGCGCTGCTAAACATAGTAGAGCCCGAGGGCCGCTGGCTGCTCG  
ATTTGATAAAACATCCTGCAGAGCATAGTGGTGCAGGAGCGCAGCTTGAGCCTGGCTGACAAGGTGGCCG  
CATCAACTATTCCATGCTTAGCCTGGGCAAGTTTTACGCCCGCAAGATATACCATAACCCCTTACGTTCCC  
ATAGACAAGGAGGTAAAGATCGAGGGGTTCTACATGCGCATGGCGCTGAAGGTGCTTACCTTGAGCGACG  
ACCTGGGCGTTTATCGCAACGAGCGCATCCACAAGGCCGTGAGCGTGAGCCGGCGGCGCGAGCTCAGCGA  
CCGCGAGCTGATGCACAGCCTGCAAAGGGCCCTGGCTGGCACGGGCGAGCGGCGATAGAGAGGCGGAGTCC  
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CTGGGCTGGCGGTGGCACCCGCGCGCGCTGGCAACGTCCGGCGGCGTGGAGGAATATGACGAGGACGATGA  
GTACGAGCCAGAGGACGGCGAGTACTAAGCGGTGATGTTTCTGATCAGATGATGCAAGACGCAACGGACC  
CGGCGGTGCGGGCGGCTGCAGAGCCAGCCGTCGGGCTTAACCTCCACGGACGACTGGCGCCAGGTCAT  
GGACCGCATCATGTCGCTGACTGCGCGCAATCCTGACGCGTTCCGGCAGCAGCCGAGGCCAACCGGCTC  
TCCGCAATTCTGGAAGCGGTGGTCCCGGCGCGCGCAACCCACGCACGAGAAGGTGCTGGCGATCGTAA  
ACGCGCTGGCCGAAAAACAGGGCCATCCGGCCGACGAGGCGGCGCTGGTCTACGACGCGCTGCTTCAGCG  
CGTGGCTCGTTACAACAGCGCAACGTGCAGACCAACCTGGACCGGCTGGTGGGGATGTGCGCGAGGCC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

GTGGCGCAGCGTGAGCGCGCAGCAGCAGGGCAACCTGGGCTCCATGGTTGCACTAAACGCCTTCTCTGA  
GTACACAGCCCGCCAAACGTGCCGCGGGGACAGGAGGACTACACCACTTTGTGAGCGCACTGCGGCTAAT  
GGTGACTGAGACACCGCAAAGTGAGGTGTACCACTCTGGGCCAGACTATTTTTTCCAGACCAGTAGACAA  
GGCCTGCAGACCGTAAACCTGAGCCAGGCTTTCAAAAACCTTGCAAGGGCTGTGGGGGGTGCAGGGCTCCCA  
CAGGCGACCGCGCAGCGTGTCTAGCTTGCTGACGCCAACCTCGCGCCTGTTGCTGCTGCTAATAGCGCC  
CTTCACGGACAGTGCGCAGCGTGTCCCGGGACACATACCTAGGTCACCTGCTGACACTGTACCGCGAGGCC  
ATAGGTCAAGCGCATGTGGACGAGCATACTTTCCAGGAGATTACAAGTGTGACCGCGCGCTGGGGCAGG  
AGGACACGGGCAGCTGGAGGCAACCTAAACTACCTGCTGACCAACCGCGCGCAGAAGATCCCCCTCGTT  
GCACAGTTTAAACAGCGAGGAGGAGCGCATTTTGCCTACGTGCAGCAGAGCGTGAGCCTTAACCTGATG  
CGCGACGGGGTAACGCCAGCGTGCGCTGGACATGACCGCGCGCAACATGGAACCGGGCATGTATGCCT  
CAAACCGGCCGTTTATCAACCGCTAATGGACTACTTGTCATCGCGCGGCCGCGTGAACCCGAGTATTT  
CACCAATGCCATCTTGAACCCGCACTGGCTACCGCCCCCTGGTTTCTACACCGGGGATTTCGAGGTGCC  
GAGGGTAACGATGGATTCTCTGCGACGACATAGACGACAGCGTGTTCCTCCCGCAACCGCAGACCTGTC  
TAGAGTTGCAACAGCGCGAGCAGGCGAGGCGCGCTGCGAAAGGAAAGCTTCCGCGAGGCCAAGCAGCTT  
GTCCGATCTAGGCGCTGCGGCCCGCGGTCAGATGCTAGTAGCCATTTCCAAGCTTGATAGGGTCTCTT  
ACCAGCACTCGCACCACCCGCGCGCTGCTGGCGAGGAGGAGTACCTAAACAACCTGCTGCTGCGAGC  
CGCAGCGCGAAAAAACCTGCTTCCGCGCATTTCCCAACAACGGGATAGAGAGCCTAGTGAGCAAGATGAG  
TAGATGGAAGACGTACGCGCAGGAGCACAGGGACGTGCCAGGCCCGCGCGCCCGCCACCCGTCGTCAAAGG  
CACGACCGTCAGCGGGGTCTGGTGTGGGAGGACGATGACTCGGCAGACGACAGCAGCGTCTGGATTG  
GAGGGAGTGGCAACCCGTTTGCACCTTCGCCCCAGGCTGGGGAGAATGTTTTAAAAAAGCAT  
GATGCAAAATAAAAACTCACCAAGGCCATGGCACCGAGCGTTGGTTTTCTTGATTCCCTTAGTATGC  
GGCGCGCGCGATGTATGAGGAAGTCTCTCTCTCTCTACGAGAGTGTGGTGAGCGCGCGCCAGTGGC  
GGCGGCGCTGGGTTCTCCCTTCGATGCTCCCTGGACCCGCGCTTTGTGCTCCGCGGTACCTGCGGCC  
ACCGGGGGGAGAAACAGCATCCGTTACTCTGAGTTGGCACCCCTATTTCGACACCACCCGTGTGTACCTGG  
TGGACAACAAGTCAACGGATGTGGCATCCCTGAATACACAGACGACCAAGCAACTTCTGACCAACCGT  
CATTCAAAACATGACTACAGCCCGGGGAGGCAAGCACACAGACCATCAATCTTGACGACCCGTCGCAC  
TGGGGCGGCGACCTGAAAACCATCCTGCATACCAACATGCCAAATGTGAACGAGTTTCATGTTTACCAATA  
AGTTTAAGGCGCGGGTGATGGTGTGCGCTTGCTACTAAGGACAATCAGGTGGAGCTGAAATACGAGTG  
GGTGGAGTTTACGCTGCCCCAGGGCAACTACTCCGAGACCATGACCATAGACCTTATGAACAACGCGATC  
GTGGAGCACTACTTGAAAGTGGGCGAGACAGAACGGGTTCTGGAAAGCGACATCGGGGTAAAGTTTGACA  
CCCGCAACTTCAGACTGGGGTTTGACCCCGTCACTGGTCTTGTCATGCCTGGGGTATATACAAACGAAGC  
CTTCCATCCAGACATCATTTTGTCTGCCAGGATGCGGGGTGGACTTCACCCACAGCCGCTGAGCAACTTG  
TTGGGCATCCGCAAGCGGCAACCTTCCAGGAGGGCTTTAGGATCACCTACGATGATCTGGAGGGTGGTA  
ACATTCGCGCACTGTTGGATGTGGACGCTTACCAGCGAGCTTGAAAGATGACACCGAACAGGGCGGGG  
TGGCGCAGCGCGCATGAAACAGCAGTGGCAGCGCGGAGAGAAGTCCAACGCGCGCAGCCGCGGATG  
CAGCCGGTGGAGGACATGAACGATCATGCCATTGCGCGCGACACCTTTGCCACACGGGCTGAGGAGAAGC  
GCGCTGAGGCCGAAGCAGCGGCCGAAGCTGCCGCCCCGCTGCGCAACCCGAGGTGAGAAGCCTCAGAA  
GAAACCGGTGATCAAAACCTTGACAGAGGACAGCAAGAAACGAGTTACAACCTAATAAGCAATGACAGC  
ACCTTCACCCAGTACCGCAGCTGGTACCTTGATACAACTACGGCGACCTCAGACCGGAATCCGCTCAT  
GGACCTGCTTTGCACTCCTGACGTAACCTGCGGCTCGGAGCAGGTCTACTGGTGGTTGCCAGACATGAT  
GCAAGACCCCGTGACCTTCCGCTCCACGCGCCAGATCAGCAACTTTCCGGTGGTGGGCGCCGAGCTGTTG  
CCCGTGCACTCCAAGAGCTTCTACAACGACAGGCGCTTACTCCCAACTCATCCGCCAGTTTACCTCTC  
TGACCCACGTGTTCAATCGCTTTCCCGAGAACCAGATTTTGGCGCGCCCGCCAGCCCCACCATCACCAC  
CGTCAGTGAAGACGTTCTCTGCTCTCACAGATCACGGGACGCTACCGCTGCGCAACAGCATCGGAGGAGTC  
CAGCGAGTGACCATTAAGTACGCGCCAGACGCGCACCTGCCCCCTACGTTTACAAGGCCCTGGGCATAGTCT  
CGCCGCGCGTCTATCGAGCCGCACTTTTGGAGCAAGCATGTCCATCCTTATATCGCCAGCAATAACAC  
AGGCTGGGGCCTGCGCTTCCCAAGCAAGATGTTTGGCGGGGCCAAGAAGCGCTCCGACCAACACCCAGTG  
CGCGTGCAGCGGCACTACCGCGCGCCCTGGGGCGCGCACAAACGCGGCCGCACTGGGCGCACCACCGTCG  
ATGACGCCATCGACCGGTTGGTGGAGGAGGCGCGCAACTACACGCCACGCGGCCACAGTGTCCACAGT  
GGACGCGGCCATTACAGACCGTGGTGGCGGAGCCCGGCGCTATGCTAAAATGAAGAGACGGCGGAGGCGC  
GTAGACGTCGCCACCGCGCCGACCCGGCATGCGGCCCAACGCGCGCGCGCGGCTTAAACCGCG  
CAGTCGCGACCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG  
CCCCAGGTCCAGGCGACGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG  
GGCAACGTGTATTGGGTGCGCGACTCGGTTAGCGGCGTGCAGCGTGCCTGCGCACCCGCCCCCGCGCA  
ACTAGATTGCAAGAAAAAACTACTTAGACTCGTACTGTTGTATGTATCCAGCGGCGGCGGCGGCGCAACGA

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

AGCTATGTCCAAGCGCAAAATCAAAGAAGAGATGCTCCAGGTCATCGCGCCGAGATCTATGGCCCCCG  
AAGAAGGAAGAGCAGGATTACAAGCCCCGAAAGCTAAAGCGGGTCAAAAAGAAAAAGAAAGATGATGATG  
ATGAACTTGACGACGAGGTGGAAGTCTGTCACGCTACCGCGCCAGGCGACGGGTACAGTGGAAGGTCTG  
ACGCGTAAACGTGTTTTGCGACCCGGCACCACCGTAGTCTTTACGCCCGGTGAGCGCTCCACCCGCACC  
TACAAGCGGTGTATGATGAGGTGTACGGCGACGAGGACCTGCTTGAGCAGGCCAACGAGCGCTCGGGG  
AGTTTGCTACGGAAGCGGCATAAGGACATGCTGGCGTTGCGCTGGACGAGGGCAACCAACACCTAG  
CCTAAAGCCCGTAACACTGCAGCAGGTGCTGCCCGCGCTTGACCGTCCGAAGAAAAGCGCGGCCCTAAAG  
CGCGAGTCTGGTGACTTGGCACCACCGTGCAGCTGATGGTACCAAGCGCCAGCGACTGGAAGATGTCT  
TGGAAAAAATGACCGTGGAACTGGGCTGGAGCCCGAGGTCCGCTGCGGCCAATCAAGCAGGTGGCGCC  
GGGACTGGGCGTGCAGACCGTGGACGTTTACAGATACCCACTACCAGTAGCACCAGTATTGCCACCGCCACA  
GAGGGCATGGAGACACAAACGTCCCCGTTGCCCTACGCGGTGGCGGATGCCGCGGTGCAGGCGGTGCTG  
CGGCCGCGTCCAAGACCTCTACGGAGGTGCAAACGGACCCGTGGATGTTTTCGCGTTTCAGCCCCCGGCG  
CCCGCGCGGTTTCAGGAAGTACGGCGCCGCGCAGCGCGCTACTGCCGAATATGCCCTACATCCTTCCATT  
GCGCCTACCCCGGCTATCGTGGCTACACCTACCGCCCGAGAACGAGCAACTACCCGACGCGGAACCA  
CCACTGGAACCCCGCCCGCGCTCGCCGTCGCCAGCCGCTGCTGGCCCGGATTTCGCTGCGCAGGGTGGC  
TCGCGAAGGAGGCAGGACCTGGTGTGCTGCCAACAGCGCGCTACCACCCAGCATCGTTTTAAAGCCGGTC  
TTTGTGGTTCTTGCAGATATGGCCCTCACCTGCCGCTCCGTTTCCCGGTGCCGGGATTCCGAGGAAGAA  
TGCACCGTAGGAGGGGCATGGCCGGCCACGGCTGACGGGCGCATGCGTCTGCGCACCACCGCGGCG  
GCGCGCGTGCACCGTGCATGCGCGGCGGTATCCTGCCCTCCTTATTCCACTGATCGCCGCGCGGATT  
GGCGCCGTGCCCGGAATTGCATCCGTGGCCTTGACGGCGCAGAGACACTGATTAATAAACAAGTTGCATGT  
GGAAAAATCAAAATAAAAAAGTCTGGACTCTACGCTCGCTTGGTCTGTAACTATTTTGTAGAATGGAAG  
ACATCAACTTTGCGTCTCTGGCCCCGCGACACGGCTCGCGCCCGTTTCATGGGAACTGGCAAGATATCGG  
CACCAGCAATATGAGCGGTGGCGCCTTCAGCTGGGGCTCGCTGTGGAGCGGCATTAAAAATTTTCGGTTCC  
ACCGTTAAGAATATGGCAGCAAGGCCCTGGAACAGCAGCACAGGCCAGATGCTGAGGGATAAGTTGAAAG  
AGCAAAATTTCCAACAAAAAGGTGGTAGATGGCCTGGCCTCTGGCATTAGCGGGGTGGTGGACCTGGCCAA  
CCAGGCAGTGCAAAATAAGATTAACAGTAAGCTTGATCCCCGCCCTCCCGTAGAGGAGCCTCCACCGGCC  
GTGGAGACAGTGTCTCCAGAGGGGCGTGGCGAAAAGCGTCCGCGCCCGACAGGGAAGAACTCTGGTGA  
CGCAATAGACGAGCCTCCCTCGTACGAGGAGGCATAAAGCAAGGCCTGCCACCAACCCGTCCCATCGC  
GCCCATGGCTACCGGAGTGCTGGGCGCAGCACACCCCGTAACGCTGGACCTGCCTCCCCCGCGGACACC  
CAGCAGAAACCTGTGCTGCCAGGCCCGACCGCGGTTGTTGTAACCCGTCCTAGCCGCGCGTCCCTGCGCC  
GCGCCGCCAGCGGTCCGCGATCGTTGCGGCCCGTAGCCAGTGGCAACTGGCAAAGCACACTGAACAGCAT  
CGTGGGTCTGGGGGTGCAATCCCTGAAGCGCCGAGATGCTTCTGAATAGCTAACGTGTCTGATGTGTGT  
CATGTATGCGTCCATGTCGCGCCAGAGGAGCTGCTGAGCCGCGCGCGCCGCTTTCCAAGATGGCTAC  
CCCTTCGATGATGCGCGAGTGGTCTTACATGCACATCTCGGGCCAGGACGCTCGGAGTACCTGAGCCCC  
GGGCTGGTGCAGTTTGCCCGCGCCACCAGACGTACTTCAGCCTGAATAACAAGTTTAGAAACCCACCG  
TGGCGCCTACGCACGACGTGACCACAGACCGGTCCAGCGTTTGACGCTGCGGTTTCATCCCTGTGGACCG  
TGAGGATACTGCGTACTCGTACAAGGCGCGGTTACCCCTAGCTGTGGGTGATAACCGTGTGCTGGACATG  
GCTTCCACGTACTTTGACATCCGCGGCGTGTGAGACAGGGGCCCTACTTTTAAGCCCTACTCTGGCACTG  
CCTACAACGCCCTGGCTCCCAAGGGTGGCCCAAATCCTTGCGAATGGGATGAAGCTGCTACTGCTCTTGA  
AATAAACCTAGAAGAAGAGGACGATGACAACGAAGACGAAGTAGACGAGCAAGCTGAGCAGCAAAAACT  
CACGTATTTGGGCAGGCGCCTTATTCTGGTATAAATATTACAAAGGAGGGTATTCAAATAGGTGTGGAAG  
GTCAAACACCTAAATATGCCGATAAAACATTTCAACCTGAACCTCAAATAGGAGAATCTCAGTGGTACGA  
AACTGAAATTAATCATGCAGCTGGGAGAGTCCCTTAAAAAGACTACCCCAATGAAACCATGTTACGGTTCA  
TATGCAAAACCCACAAATGAAAATGGAGGGCAAGGCATCTTGTAAAGCAACAAAATGGAAGCTAGAAA  
GTCAAGTGGAAATGCAATTTTCTCAACTACTGAGGCGACCGCAGGCAATGGTGATAACTTGACTCTTAA  
AGTGGTATTGTACAGTGAAGATGTAGATATAGAAACCCAGACACTCATATTTCTTACATGCCCACTATT  
AAGGAAGGTAACCTACGAGAACTAATGGGCAACAATCTATGCCCAACAGGCCTAATTACATTGCTTTTA  
GGGACAATTTTATTGGTCTAATGTATTACAACAGCAGGGTAATATGGGTGTTCTGGCGGGCCAAGCATC  
GCAGTTGAATGCTGTTGTAGATTTGCAAGACAGAAACACAGAGCTTTCATACCAGCTTTTGCTTGATTCC  
ATTGGTGATAAGAACCAGGTACTTTCTATGTGGAATCAGGCTGTTGACAGCTATGATCCAGATGTAGAA  
TTATTGAAATCATGGAAGTGAAGATGAACCTTCAAATTAAGTCTTCCACTGGGAGGTGTGATTAATAC  
AGAGACTCTTACCAAGGTAAAACTAAAAACAGGTACAGGAAAATGGATGGGAAAAAGATGTACAGAAATTT  
TCAGATAAAAAATGAAAATAAGAGTTGGAAATAATTTTGCCATGGAAATCAATCTAAATGCCAACCTGTGGA  
GAAATTTCTGTACTCCAACATAGCGCTGTATTTGCCCGACAAGCTAAAGTACAGTCCTTCCAACGTAAA  
AATTTCTGATAACCCAAACACCTACGACTACATGAACAAGCGAGTGGTGGCTCCCGGGTTAGTGGACTGC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

TACATTAACCTTGGAGCACGCTGGTCCCTTGACTATATGGACAACGTCAACCCATTTAACCACCACCGCA  
ATGCTGGCCTGCGCTACCGCTCAATGTTGCTGGGCAATGGTCGCTATGTGCCCTTCCACATCCAGGTGCC  
TCAGAAGTTCTTTGCCATTAAAAACCTCCTTCTCCTGCCGGGCTCATACACCTACGAGTGGAACCTCAGG  
AAGGATGTTAACATGGTTCTGCAGAGCTCCCTAGGAAATGACCTAAGGGTTGACGGAGCCAGCATTAAAGT  
TTGATAGCATTTGCCTTTACGCCACCTTCTTCCCCATGGCCCAACACCGCCTCCACGCTTGAGGCCAT  
GCTTAGAAACGACACCAACGACCAGTCCCTTAAACGACTATCTCTCCGCCGCAACATGCTCTACCCTATA  
CCCGCCAACGCTACCAACGTGCCCATATCCATCCCCCTCCGCAACTGGGCGGCTTTCCGCGGCTGGGCTT  
TCACGCGCTTAAGACTAAGGAAACCCCATCACTGGGCTCGGGCTACGACCCTTATTACACCTACTCTGG  
CTCTATACCCTACCTAGATGGAACCTTTTACCTCAACCACACCTTTAAGAAGGTGGCCATTACCTTTGAC  
TCTTCTGTGCTGAGCTGGCCTGGCAATGACCGCCTGCTTACCCCCAACGAGTTTGAAATTAAGCGCTCAGTTG  
ACGGGGAGGGTTACAACGTTGCCAGTGTAACATGACCAAAGACTGGTTCCTGGTACAAATGCTAGCTAA  
CTACAACATTGGCTACCAGGGCTTCTATATCCCAGAGAGCTACAAGGACCGCATGTACTCCTTCTTTAGA  
AACTTCCAGCCCATGAGCCGTCAGGTGGTGGATGATACTAAATACAAGGACTACCAACAGGTGGGCATCC  
TACACCAACACAACAACCTCTGGATTTGTTGGCTACCTTGCCCCCACCATGCGCGAAGGACAGGCCTACCC  
TGCTAACTTCCCCTATCCGCTTATAGGCAAGACCGCAGTTGACAGCATTACCCAGAAAAAGTTTCTTTG  
GATCGCACCCCTTTGGCGCATCCCATTTCTCCAGTAACCTTATGTCCATGGGCGCACTCACAGACCTGGGCC  
AAAACCTTCTCTACGCCAACTCCGCCACGCGCTAGACATGACTTTTGAGGTGGATCCCATGGACGAGCC  
CACCTTCTTTATGTTTTGTTTGAAGTCTTTGACGTGGTCCGTGTGCACCGGCCGACCGCGGCGTCATC  
GAAACCGTGTACCTGCGCACGCCCTTCTCGGCCGGCAACGCCACAACATAAAGAAGCAAGCAACATCAAC  
AACAGCTGCCGCCATGGGCTCCAGTGAGCAGGAACGAAAGCCATTGTCAAAGATCTTGGTTGTGGGCCA  
TATTTTTTTGGGCACCTATGACAAGCGCTTTCCAGGCTTTGTTTCTCCACACAAGCTCGCCTGCGCCATAG  
TCAATACGGCCGGTTCGCGAGACTGGGGGCGTACACTGGATGGCCTTTGCCTGGAACCCGCACCTCAAAAAC  
ATGCTACCTCTTTGAGCCCTTTGGCTTTTCTGACCAGCGACTCAAGCAGGTTTACCAGTTTGAGTACGAG  
TCACTCCTGCGCCGTAGCGCCATTGCTTCTTCCCCGACCGCTGTATAACGCTGGAAGTCCACCCAAA  
GCGTACAGGGGCCAACTCGGCCGCTGTGGACTATTCTGCTGCATGTTTCTCCACGCTTTGCCAACTG  
GCCCCAAACTCCCATGGATGACAAACCCACCATTGAACCTTATTACCGGGGTACCCAACTCCATGCTCAAC  
AGTCCCCAGGTACAGCCCACCTGCGTCGCAACCAGGAACAGCTCTACAGCTTCTGAGCGCCACTCGC  
CCTACTTCCGAGCCACAGTGCGCAGATTAGGAGCGCCACTTCTTTTTGTCACTTGAAAAACATGTAAAA  
ATAATGTACTAGAGACACTTTCAATAAAGGCAAATGCTTTTTATTTGTACTCTCGGGTGATTATTTACC  
CCCACCTTGGCGTCTGCGCCGTTTAAAAATCAAAGGGGTTCTGCCGCGCATCGCTATGCGCCACTGGCA  
GGGACACGTTGCGATACTGGTGTTAGTGCTCCACTTAAACTCAGGCACAACCATCCGCGGCAGCTCGGT  
GAAGTTTTCACTCCACAGGCTGCGCACCATACCAACGCGTTTAGCAGGTGCGGCGCGGATATCTTGAAG  
TCGCAGTTGGGGCTCCGCCCTGCGCGCGGAGTTGCGATACACAGGGTTGCAGCACTGGAACACTATCA  
GCGCCGGGTGGTGACGCTGCGCCAGCAGCTTTGTGCGAGATCAGATCCGCGTCCAGGCTCTCCGCGTT  
GCTCAGGGCGAAGCGAGTCAACTTTGGTAGTGCCTTCCCAAAAAGGGCGCGTGGCCAGGCTTTGAGTTG  
CACTCGCACCGTAGTGGCATCAAAAGGTGACCGTGCCCGGTCTGGGCGTTAGGATACAGCGCCTGCATAA  
AAGCCTTGATCTGCTTAAAGGCCACCTGAGCCTTTGCGCCTTCAGAGAAGAATGCGCAAGACTTGCC  
GGAAGACTGATTGGCCGGACAGGCCGCGTCTGTCACGCAGCACCTTGCGTGGTGTGGAGATCTGCACC  
ACATTTGCGCCCCACCGGTTCTTACGATCTTGGCCTTGCTAGACTGCTCCTTCAGCGCGCGCTGCCCGT  
TTTTCGCTCGTCACATCCATTTCAATCACGTGCTCCTTATTTATCATAATGCTTCCGTGTAGACACTTAAG  
CTCGCCTTCGATCTCAGCGCAGCGGTGCAGCCACAACGCGCAGCCCGTGGGCTCGTGATGCTTGTAGGTC  
ACCTCTGCAAACGACTGCAGGTACGCCTGCAGGAATCGCCCCATCATCGTCACAAAGGTCTTGTGTCTGG  
TGAAGGTGAGTGCACACCCGCGGTGCTCCTCGTTACGCGAGGTCTTGCATACGGCCGCGAGCTTCCAC  
TTGGTACAGGCAGTAGTTTGAAGTTCGCCTTTAGATCGTTATCCACGTGGTACTTGTCCATCAGCGCGCG  
GCAGCCTCCATGCCCTTCTCCACGCAGACACGATCGGCACACTCAGCGGGTTCATCACCGTAATTTTAC  
TTTCCGCTTCGCTGGGCTCTTCTCTTCTTCTTGCCTCCGCATACACGCGCCACTGGGTGCTCTTCATT  
CAGCCGCGCGACTGTGCGCTTACCTCCTTTGCCATGCTTGATTAGCACCGGTGGGTTGCTGAAACCCACC  
ATTTGTAGCGCCACATCTTCTTCTTCTTCTCGCTGTCCACGATTACCTCTGGTGATGGCGGGCGCTCGG  
GCTTGGGAGAAGGGCGCTTCTTTTCTTCTTGGGCGCAATGGCCAAATCCGCCGCGGAGGTGATGGCCG  
CGGGCTGGGTGTGCGCGGCACAGCGGCTTGTGATGAGTCTTCTCGTCTCGGACTCGATACGCCCG  
CTCATCCGCTTTTTTGGGGGCGCCCGGGGAGCGCGGCGGACGGGGACGGGACGACAGCTCCTCCATGG  
TTGGGGGACGTGCGCGCCGACCGGCTCCGCGCTCGGGGGTGGTTTCGCGCTGCTCCTCTTCCCGAGTGC  
CATTTCTTCTCTTATAGGCAGAAAAAGATCATGGAGTCAGTCGAGAAGAAGGACAGCCTAACCGCCCCC  
TCTGAGTTCGCCACCACCGCCTCCACCGATGCCGCCAACGCGCCTACCACCTTCCCCGTCGAGGCACCCC  
CGCTTGAGGAGGAGGAAGTGATTATCGAGCAGGACCCAGGTTTTGTAAAGCAAGACGACGAGGACCGCTC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

AGTACCAACAGAGGATAAAAAAGCAAGACCAGGACAACGCAGAGGCAAACGAGGAACAAGTCGGGCGGGGG  
GACGAAAGGCATGGCGACTACCTAGATGTGGGAGACGACGTGCTGTTGAAGCATCTGCAGCGCCAGTGCG  
CCATTATCTGCGACGCGTTGCAAGAGCGCAGCGATGTGCCCTCGCCATAGCGGATGTCAGCCTTGCCCTA  
CGAACGCCACCTATTCTCACC GCGCGTACCCCCCAAACGCCAAGAAAACGGCACATGCGAGCCCAACCCG  
CGCCTCAACTTCTACCCCGTATTTGCCGTGCCAGAGGTGCTTGCCACCTATCACATCTTTTTTCCAAAACT  
GCAAGATACCCCTATCCTGCCGTGCCAACCGCAGCCGAGCGGACAAGCAGCTGGCCTTGCGGCAGGGCGC  
TGTCATACCTGATATCGCCTCGCTCAACGAAGTGCCAAAAATCTTTGAGGGTCTTGACGCGCAGCAGAAG  
CGCGCGCAAACGCTCTGCAACAGGAAAACAGCGAAAATGAAAGTCACTCTGGAGTGTTGGTGGAACCTCG  
AGGGTGACAACGCGCGCCTAGCCGTACTAAAACGCAGCATCGAGGTACCCACTTTGCCTACCCGGCACT  
TAACCTACCCCCAAGGTCATGAGCACAGTTCATGAGTGAGCTGATCGTGCGCCGTGCGCAGCCCTGGAG  
AGGGATGCAAATTTGCAAGAACAAACAGAGGAGGGCTACCCGAGTTGGCGACGAGCAGCTAGCGCGCT  
GGCTTCAAACGCGCGAGCCTGCCGACTTGAGGAGCGACGCAAACTAATGATGGCCGAGTGCTCGTTAC  
CGTGAGGCTTGAGTGTCATGCAGCGGTCTTTGCTGACCCGGAGATGCAGCGCAAGCTAGAGGAAAACATTG  
CACTACACCTTTTCGACAGGGCTACGTACGCCAGGCCTGCAAGATCTCCAACGTGGAGCTCTGCAACCTGG  
TCTCTACCTTGGAATTTTGACGAAAACCGCCTTGGGCAAAACGTGCTTCAATCCACGCTCAAGGGCGA  
GGCGCGCCGCGACTACGTCGCGACTGCGTTTACTTATTCTATGCTACACCTGGCAGACGGCCATGGGC  
GTTTGGCAGAGTGCTTGAGGAGTGCAACCTCAAGGAGCTGCAGAACTGCTAAAGCAAACTTGAAGG  
ACCTATGGACGGCCTTCAACGAGCGCTCCGTGGCGCGCACCTGGCGGACATCATTTTCCCGAACCGCT  
GCTTAAACCCCTGCAACAGGGTCTGCCAGACTTCACAGTCAAAGCATGTTGCAGAACTTTAGGAACCTT  
ATCCTAGAGCGCTCAGGAATCTTGCCCGCCACCTGCTGTGCACTTCCTAGCGACTTTGTGCCCATTAAGT  
ACCGCGAATGCCCTCCGCGCTTTGGGGCCACTGCTACCTTCTGCAGCTAGCCAACCTACCTTGCTTACCA  
CTCTGACATAATGGAAGACGTGAGCGGTGACGGTCTACTGGAGTGTCAGTGTGCTGCAACCTATGCACC  
CCGACCCGCTCCCTGGTTTGCAATTCGCAGCTGCTTAACGAAAGTCAAATTATCGGTACCTTTGAGCTGC  
AGGGTCCCTCGCCTGACGAAAAGTCCGCGGCTCCGGGGTTGAACTCACTCCGGGGCTGTGGACGTGGC  
TTACTTTCGCAAATTTGTACCTGAGGACTACCACGCCACGAGATTAGGTTCTACGAAGACCAATCCCGC  
CCGCCAAATGCGGAGCTTACC GCTTACCGCTGCGTCTATTACCCAGGGCCACATTCTTGCCCAATTGCAAGCCATCA  
ACAAAGCCCGCCAAGAGTTTCTGCTACGAAAGGGACGGGGGGTTTACTTGACCCCCAGTCCGGCGAGGA  
GCTCAACCCAATCCCCCGCGCCGCGAGCCCTATCAGCAGCAGCCGCGGGCCCTTGCTTCCAGGATGGC  
ACCCAAAAAGAAGCTGCAGCTGCCGCGCCACCCACGAGCAGGAGGAATACTGGGACAGTCAGGCAGAG  
GAGGTTTTGGACGAGGAGGAGGAGGACATGATGGAAGACTGGGAGAGCCTAGACGAGGAAGCTTCCGAGG  
TCGAAGAGGTGTGACAGCAAAACACCGTCACCTCGGTGCGATTCCCTCGCCGGCGCCCCAGAAATCGGC  
AACCGGTTCCAGCATGGCTACAACCTCCGCTCCTCAGGCGCCGCGGCACTGCCCGTTGCGCGACCCAAC  
CGTAGATGGGACACCACTGGAACAGGGCCGGTAAGTCCAAGCAGCCGCGCGCTTAGCCCAAGAGCAAC  
AACAGCGCAAGGCTACCGCTCATGGCGCGGGCACAGAACGCCATAGTTGCTTGCTTGCAAGACTGTGG  
GGGCAACATCTCCTTCGCCCCGCGCTTTCTTCTCTACCATACGGCGTGGCCTTCCCCCGTAACATCCTG  
CATTACTACCGTCATCTCTACAGCCCATACTGCACCGGCGGCAGCGGCAGCGGCAGCAACAGCAGCGGCC  
ACACAGAAGCAAAGGCGACCGGATAGCAAGACTCTGACAAAGCCCAAGAAATCCACAGCGGCGGCAGCAG  
CAGGAGGAGGAGCGCTGCGTCTGGCGCCCAACGAACCCGTATCGACCCGCGAGCTTAGAAACAGGATTTT  
TCCCACTCTGTATGCTATATTTCAACAGAGCAGGGGCCAAGAACAAGAGCTGAAAATAAAAAACAGGTCT  
CTGCGATCCCTCACCCGAGCTGCCTGTATCACAAAAGCGAAGATCAGCTTCGGCGCACGCTGGAAGACG  
CGGAGGCTCTCTCAGTAAATACTGCGCGCTGACTCTTAAGGACTAGTTTCGCGCCCTTTCTCAAATTTA  
AGCGCGAAAACTACGTCTCTCCAGCGGCCACACCCGGCGCCAGCACCTGTGTCAGCGCCATTATGAGC  
AAGGAAATTTCCACGCCCCATCATGTGGAGTTACCAGGCCACAAATGGGACTTGCGGCTGGAGCTGCCCAAG  
ACTACTCAACCCGAATAAACTACATGAGCGCGGGACCCACATGATATCCCGGGTCAACGGAATCCGCGC  
CCACCGAAACCGAATTCTCTTGGAACAGGCGGCTATTACCACCACACCTCGTAATAACCTTAATCCCCGT  
AGTTGGCCCGCTGCCCTGGTGTACCAGGAAAGTCCCGCTCCCACTGTGGTACTTCCAGAGACGCCC  
AGGCCGAAGTTTCAATGACTAAGTCAAGGGGCGCAGCTTGCGGGCGGCTTTGCTCACAGGGTGCGGTGCGC  
CGGGCAGGGTATAACTCACTGACAATCAGAGGGCGAGGTATTAGCTCAACGACGAGTCGGTGAGCTCC  
TCGCTTGGTCTCCGTCCGGACGGGACATTTAGATCGGCGGCGCGCGGCGCTCTTCAATTCACGCTCGTC  
AGGCAATCTTAACCTCTGCAGACCTCGTCTCTGAGCCGCGCTCTGGAGGCATTGGAACCTCTGCAATTTAT  
TGAGGAATTTGTGCCATCGGTCTACTTTAACCCCTTCTCGGGACCTCCCGGCCACTATCCGGATCAATTT  
ATTCTAATCTTTGACGCGGTAAAGGACTCGGCGGACGGCTACGACTGAATGTTAAGTGAGAGGCAGAGC  
AACTGCGCCTGAAACACCTGGTCCACTGTGCGCGCCACAAGTGCTTTGCGCGGACTCCGGTGAGTTTTG  
CTACTTTGAATTGCCCCAGGATCATATCGAGGGCCCGGCGCACGGCGTCCGGCTTACCGCCAGGGAGAG  
CTTGCCCGTAGCCTGATTGCGGAGTTTACCAGCGCCCCCTGCTAGTTGAGCGGGACAGGGACCCCTGTG



Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

TTCTCACTGTGATTTGCAACTGTCCTAACCTTGGATTACATCAAGATCTTTGTTGCCATCTCTGTGCTGA  
GTATAATAAATACAGAAATTAATAATATACTGGGGCTCCTATCGCCATCCTGTAAACGCCACCGTCTTCAC  
CCGCCCCAAGCAAACCAAGGCGAACCTTACCTGGTACTTTTAAACATCTCTCCCTCTGTGATTTACAACAGT  
TTCAACCCAGACGGAGTGAGTCTACGAGAGAACCTCTCCGAGCTCAGCTACTCCATCAGAAAAAACACCA  
CCCTCCTTACCTGCCGGGAACGTACGAGTGCGTCACCGGCCGCTGCACCACACCTACCGCCTGACCGTAA  
ACCAGACTTTTTCCGGACAGACCTCAATAACTCTGTTTACCAGAACAGGAGGTGAGCTTAGAAAAACCTT  
AGGGTATTAGGCCAAAGGCGCAGCTACTGTGGGGTTTATGAACAATTCAAGCAACTCTACGGGCTATTCT  
AATTCAGGTTTCTCTAGAAATGGACGGAATTATTACAGAGCAGCGCCTGCTAGAAAGACGCAGGGCAGCG  
GCCGAGCAACAGCGCATGAATCAAGAGCTCCAAGACATGGTTAACTTGCACCAGTGCAAAAAGGGGTATCT  
TTTGTCTGGTAAAGCAGGCCAAAGTCACCTACGACAGTAATACCACGGACACCGCCTTAGCTACAAGTT  
GCCAACCAAGCGTCAGAAATTGGTGGTCATGGTGGGAGAAAAGCCATTACCATAACTCAGCACTCGGTA  
GAAACCGAAGGCTGCATTCACCTACCTTGTCAAGGACCTGAGGATCTCTGCACCCCTTATTAAGACCCTGT  
GCGGTCTCAAAGATCTTATTCCCTTTAACTAATAAAAAAATAATAAAGCATCACTTACTTAAAAATCAG  
TTAGCAAAATTTCTGTCCAGTTTATTTCAGCAGCACCTCCTTGCCCTCCTCCCAGCTCTGGTATTGCAGCTT  
CCTCCTGGCTGCAAACTTTCTCCACAATCTAAATGGAATGTCAAGTTTCTCCTGTTCCTGTCCATCCGCA  
CCCACATCTTCATGTTGTTGCAGATGAAGCGCGCAGACCGTCTGAAGATACCTTCAACCCCGTGTATC  
CATATGACACGGAAACCGTCCCTCCAACCTGTGCCTTTTCTTACTCCTCCCTTTGTATCCCCCAATGGGTT  
TCAAGAGAGTCCCCCTGGGGTACTCTCTTTGCGCCTATCCGAACCTCTAGTTACCTCCAATGGCATGCTT  
GCGCTCAAAATGGGCAACGGCCTCTCTCTGGACGAGGCGGCAACCTTACCTCCCAAAATGTAACCACTG  
TGAGCCCACTCTCAAAAAAACCAAGTCAAACATAAACCTGGAAATATCTGCACCCCTCACAGTTACCTC  
AGAAGCCCTAACTGTGGTGTCCGCGCACCTCTAATGGTTCGCGGGCAACACACTCACCATGCAATCACAG  
GCCCCGCTAACCGTGCACGACTCCAAACTTAGCATTGCCACCCAAGGACCCCTCACAGTGTGAGAAGGAA  
AGCTAGCCCTGCAAAACATCAGGCCCCCTCACCACCACCGATAGCAGTACCCTTACTATCACTGCCTCACC  
CCCTCTAACTACTGCCACTGGTAGCTTGGGCATTGACTTGAAAGAGCCCATTTATACACAAAATGGAAAA  
CTAGGACTAAAGTACGGGGCTCCTTTGCATGTAAACAGACGCTTAAACACTTTGACCGTAGCAACTGGTC  
CAGGTGTGACTATTAAATAATACTTCTTGTCAAACCTAAAGTTACTGGAGCCTTGGGTTTGTATTACAAAG  
CAATATGCAACTTAATGTAGCAGGAGGACTAAGGATTGATTCTCAAAACAGACGCCTTATACTTGATGTT  
AGTTATCCGTTTGTATGCTCAAAACCAACTAAATCTAAGACTAGGACAGGGCCCTCTTTTTATAAACTCAG  
CCCACAACTTGGATATTAACCTACAACAAAGGCCCTTTACTTGTTTACAGCTTCAAACAATTCCAAAAAGCT  
TGAGGTTAACTTAAGCACTGCCAAGGGGTTGATGTTTGTAGCCTACAGCCATAGCCATTAAATGCAGGAGAT  
GGGCTTGAATTTGGTTACCTAATGCACCAAAACAAAATCCCCCTCAAAACAAAAATTGGCCATGGCCTAG  
AATTTGATTCAAACAAGGCTATGGTTCCCTAACTAGGAACCTGGCCTTAGTTTTGTAGCAGCAGGTTGCCAT  
TACAGTAGGAAACAAAAATAATGATAAGCTAACTTTGTGGACCACACCAGCTCCATCTCCTAACTGTAGA  
CTAAATGTCAGAGAAAGATGCTAAACTCACTTTGGTCTTAAACAAAATGTGGCAGTCAAATACTTGCTACAG  
TTTCAGTTTGTGCTGTATAAGGCAGTTTGGCTCCAATATCTGGAACAGTTCAAAGTGCTCATCTTATTAT  
AAGATTTGACGAAAATGGAGTGCTACTAAACAATTCCTTCTGACCCAGAATATTGGAACCTTTAGAAAT  
GGAGATCTTACTGAAGGCACAGCCTATACAAACGCTGTTGGATTTATGCCTAACCTATCAGCTTATCCAA  
AATCTCACGGTAAAACCTGCCAAAAGTAACATTGTCAAGTTTACTTAAACGGAGACAAAACCTAAACC  
TGTAACACTAACCATTACACTAAACGGTACACAGGAAACAGGAGACACAACCTCAAAGTGCTACTCTATG  
TCATTTTTCATGGGACTGGTCTGGCCACAACCTACATTAATGAAATATTTGCCACATCCTCTTACACTTTTT  
CATACATTGCCCAAGAATAAAGAAATCGTTTGTGTTATGTTTCAACGTGTTTATTTTTCAATTGCAGAAAA  
TTTCGAATCATTTTTTCATTAGTAGTATAGCCCCACCACCATAGCTTATACAGATCACCGTACCTTAA  
TCAAACCTCACAGAACCCCTAGTATTCAACCTGCCACCTCCCTCCCAACACACAGAGTACACAGTCCCTTCT  
CCCCGGCTGGCCTTAAAAAGCATCATATCATGGGTAACAGACATATTCTTAGGTGTTATATTCCACACGG  
TTTCTGTGTCGAGCCAAACGCTCATCAGTGATATTAATAAACTCCCCGGGCAGCTCACTTAAGTTTCATGTC  
GCTGTCCAGCTGCTGAGCCACAGGCTGCTGTCCAACCTGCGGTTGCTTAACGGGCGGCGAAGGAGAAGTC  
CACGCCTACATGGGGGTAGAGTCATAATCGTGCATCAGGATAGGGCGGTGGTGCTGCAGCAGCGCGCGAA  
TAAACTGCTGCCGCCGCCGCTCCGTCTGTCAGGAATACAACATGGCAGTGGTCTCCTCAGCGATGATTCG  
CACCGCCCGCAGCATAAGGCGCCTTGTCCTCCGGGCACAGCAGCGCACCTGATCTCACTTAAATCAGCA  
CAGTAAGTGCAGCACAGCACCACAATATTGTTCAAAATCCCACAGTGCAAGGCGCTGTATCCAAAGCTCA  
TGGCGGGGACCACAGAACCACAGTGGCCATATACCACAAGCGCAGGTAGATTAAAGTGGCGACCCCTCAT  
AAACACGCTGGACATAAAACATTACCTCTTTTGGCATGTTGTAATTCACCACCTCCCGGTACCATATAAAC  
CTCTGATTAAACATGGCGCCATCCACCACCATCTTAAACCAGCTGGCCAAAACCTGCCCCCGGGCTATAC  
ACTGCAGGGAACCGGGACTGGAACAATGACAGTGGAGAGCCAGGACTCGTAACCATGGATCATCATGCT  
CGTCATGATATCAATGTTGGCACAACACAGGCACACGTGCATACACTTCTCAGGATTACAAGCTCTCTCC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

CGCGTTAGAACCATATCCAGGGAACAACCCATTCTGAATCAGCGTAAATCCCACACTGCAGGGAAGAC  
CTCGCACGTAACCTACGTTGTGCATTGTCAAAGTGTTACATTCCGGGCAGCAGCGGATGATCCTCCAGTAT  
GGTAGCGCGGGTTTCTGTCTCAAAAGGAGGTAGACGATCCCTACTGTACGGAGTGCGCCGAGACAACCGA  
GATCGTGTTGGTCGTAGTGTCTATGCCAAATGGAACGCCGACGTAGTCATATTTCTGAAGCAAAACCAG  
GTGCGGGCGTGACAAACAGATCTGCGTCTCCGGTCTCGCCGCTTAGATCGCTCTGTGTAGTAGTTGTAGT  
ATATCCACTCTCTCAAAGCATCCAGGCGCCCCCTGGCTTCGGGTTCTATGTAAACTCCTTCATGCGCCGC  
TGCCCTGATAACATCCACCACCGCAGAATAAGCCACACCCAGCCAACCTACACATTGTTCTGCGAGTCA  
CACACGGGAGGAGCGGGAAGAGCTGGAAGAACCATGTTTTTTTTTTTATTCCAAAAGATTATCCAAAACC  
TCAAATGAAGATCTATTAAAGTGAACGCGCTCCCCCTCCGGTGGCGTGGTCAAACCTCTACAGCCAAAAGAAC  
AGATAATGGCATTGTGAAGATGTTGCACAATGGCTTCCAAAAGGCAAACGGCCCTCACGTCCAAGTGGAC  
GTAAAGGCTAAACCCCTTCAGGGTGAATCTCCTCTATAAACATTCCAGCACCTTCAACCATGCCCAAATAA  
TTCTCATCTCGCCACCTTCTCAATATATCTCTAAGCAAATCCCGAATATTAAGTCCGGCCATTGTAAAAA  
TCTGCTCCAGAGCGCCCTCCACCTTCAGCCTCAAGCAGCGAATCATGATTGCAAAAATTCAGGTTCTCTCA  
CAGACCTGTATAAGATTCAAAAAGCGGAACATTAACAAAAATACCGCGATCCCGTAGGTCCCTTCGCAGGG  
CCAGCTGAACATAATCGTGCAGGTCTGCACGGACAGCGCGGCCACTTCCCCGCCAGGAACCTTGACAAA  
AGAACCCACACTGATTATGACACGCATCTCGGAGCTATGCTAACAGCGTAGCCCCGATGTAAGCTTTG  
TTGCATGGGCGGCGATATAAAATGCAAGGTGCTGCTCAAAAAATCAGGCAAAGCCTCGCGCAAAAAGAA  
AGCACATCGTAGTCATGCTCATGCAGATAAAGGCAGGTAAGCTCCGGAACCACCACAGAAAAAGACACCA  
TTTTTCTCTCAAACATGTCTGCGGGTTTCTGCATAAACACAAAATAAAATAACAAAAAACATTTAAACA  
TTAGAAGCCTGTCTTACAACAGGAAAAACAACCCCTTATAAGCATAAGACGGACTACGGCCATGCCGCGCT  
GACCGTAAAAAACTGGTCAACCGTGATTAAGAACACACCGACAGCTCCTCGGTCATGTCCGGAGTCAT  
AATGTAAGACTCGGTAAACACATCAGGTTGATTACATCGGTCAAGTGCTAAAAAGCGACCGAAATAGCCC  
GGGGGAATACATACCCGACGGCGTAGAGACAACATTACAGCCCCCATAGGAGGTATAACAAAATTAATAG  
GAGAGAAAAACACATAAACACCTGAAAAACCCCTCCTGCCTAGGCAAAATAGCACCCCTCCCGCTCCAGAAC  
AACATACAGCGCTTCCACAGCGGCAGCCATAACAGTCAGCCTTACCAGTAAAAAAGAAAACCTATTAAAA  
AAACACCACTCGACACGGCACCGCTCAATCAGTCACAGTGTAAGAAAGGGCCAAGTGCAGAGCGAGTAT  
ATATAGGACTAAAAAATGACGTAACGGTTAAAGTCCACAAAAAACCCAGAAAACCGCACGCGAACCTTA  
CGCCAGAAAACGAAAGCCAAAAAACCCACAACCTTCTCAAATCGTCACTTCCGTTTTCCACGTTACGTC  
ACTTCCCATTTTAAAGAAAACACAATTCCCAACACATAACAAGTTACTCCGCCCTAAAACCTACGTCACCC  
GCCCCGTTCCACGCCCCGCGCCACGTCACAACTCCACCCCTCATTATCATATTGGCTTCAATCCAAA  
ATAAGGTATATTATTGATGATGTTAATTAAATTAATCCGCATGCGATATCGAGCTCTCCCGGGAATTTCG  
GATCTGCGACGCGAGGCTGGATGGCTTCCCCATTATGATTCTTCTCGCTTCCGGCGGCATCGGGATGCC  
CGCGTTGCAGGCCATGTGTCCAGGCAGGTAGATGACGACCATCAGGGACAGCTTACGGCCAGCAAAAG  
GCCAGAACCGCTAAAAAGCCGCGTTGTGTGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACA  
AAAATCGAGCGTCAAGTCAGAGGTGGCGAAACCCGACGAGACTATAAGATACAGGCGTTTTCCCCCTGG  
AAGCTCCCTCGTGCGCTCTCCTGTTCCGACCTGCGCGTTACCGGATACCTGTCCGCCTTTCTCCCTTCG  
GGAAGCGTGGCGCTTTCTCAATGCTCACGCTGTAGGTATCTCAGTTCCGTTGAGGTGCTTCCGCTCCAAGC  
TGGGCTGTGTGCACGAACCCCCGTTACGCCCCGACCGCTGCGCCTTATCCGGTAACCTATCGTCTTGAGTC  
CAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTAT  
GTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCTAACCTACGGCTACACTAGAAGGACAGTATTTGGTA  
TCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAAACCAC  
CGCTGGTAGCGGTGGTTTTTTTGTGTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGAT  
CCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACCTACGTTAAGGGATTTTGGTCATGA  
GATTATCAAAAAGGATCTTACCTAGATCCTTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCT  
GACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCTGTTTATCCATAGTTG  
CCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGAT  
ACCGCGAGACCCACGCTACCCGGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGAAGGGCCGAGCGC  
AGAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTAAGTA  
GTTCCGCAAGTTAATAGTTTGCAGCAACGTTGTTGCCATTGNTGCAGGCATCGTGGTGTACGCTCGTCTGTT  
TGGTATGGCTTCATTACGCTCCGGTTCCTCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAA  
AAAGCGTTAGCTCCTTCGGTCTCCGATCGTTGTGCAAGTAAGTTGGCCGAGTGTATCACTCATGGA  
TTATGGCAGCACTGCATAATTCTTACTGTCTATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTA  
CTCAACCAAGTCATTCTGAGAATAGTGATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAACACGGGAT  
AATACCGCGCCACATAGCAGAACTTTAAAGTGCTCATCATTTGAAAACGTTCTTCGGGGCGAAAACTCT  
CAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATC



Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

TTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGG  
GCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTATCAGGGTTATT  
GTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCC  
CCGAAAAGTGCCACCTGACGTCTAAGAAACCATTTATTATCATGACATTAACTATAAAAAATAGGCGTATC  
ACGAGGCCCTTTCGTCTTCAAGGATCCGAATTCCCGGGAGAGCTCGATATCGCATGCGGATTTAAATTAA  
TTAA

Please amend Table 11 on pages 385-394 as follows:

Table 11: Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™ (SEQ ID NO: 88).

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CATCATCAATAATATACCTTATTTTGGATTGAAGCCAATATGATAATGAGGGGGTGGAGTTTGTGACGTG
GCGCGGGGCGTGGGAACGGGGCGGGTGACGTAGTAGTGTGGCGGAAGTGTGATGTTGCAAGTGTGGCGGA
ACACATGTAAGCGACGGATGTGGCAAAAAGTGACGTTTTTGGTGTGCGCCGGTGTACACAGGAAGTGACAA
TTTTCGCGCGGTTTTAGGCGGATGTTGTAGTAAATTTGGGCGTAACCGAGTAAGATTTGGCCATTTTCGC
GGGAAAAGTGAATAAGAGGAAGTGAAATCTGAATAATTTTGTGTTACTCATAGCGCGTAATATTTGTCTA
GGGCCGCGGGGACTTTGACCGTTTACGTGGAGACTCGCCAGGTGTTTTTCTCAGGTGTTTTCCGCGTTC
CGGGTCAAAGTTGGCGTTTTATTATTATAGTCAAGCTTGGATCCGGTACCTCTAGAATTTCTCGAG
CGGCCGCTAGCGACATCGGATCTCCCGATCCCCATGGTTCGACTCTCAGTACAATCTGCTCTGATGCCG
ATAGTTAAGCCAGTATCTGCTCCCTGCTTGTGTGTTGGAGGTCGCTGAGTAGTGCGCGAGCAAAATTTAA
GCTACAACAAGGCAAGGCTTGACCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGC
TTCGCGATGTACGGGCCAGATATACGCGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTAC
GGGGTCATTAGTTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATGGCCCGCTGGC
TGACCGCCCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGA
CTTTCCATTGACGTCAATGGGTGGACTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGATCA
TATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCAGTACATG
ACCTTATGGGACTTTCTTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCCGT
TTTGGCAGTACATCAATGGGCGTGATAGCGTTTGACTCACGGGGATTTCAGTCTCCACCCCATGTA
CGTCAATGGGAGTTTGTGTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTGTAACAACCTCCGCCCA
TTGACGCAAATGGGCGGTAGGCGGTGACGGTGGGAGGTCTATATAAGCAGAGCTCTCTGGCTAACTAGAG
AACCCTACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAGGGAGACCCAAGCTGGCTAGTTAAG
CTATCAACAAGTTTGTACAAAAAGCAGGCTCCGCGCGCGCCCCCTTACCATGATAGATCCCGTCGTTT
TACAACGTCGTGACTGGGAAAACCTGGCGTTACCCAACCTTAATCGCCTTGACGACATCCCCCTTTCGC
CAGCTGGCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAA
TGGCGCTTTGCGCTGGTTTCCGGCACCAAGCGGTGCCGGAAGCTGGCTGGAGTGCGATCTTCTTGAGG
CCGATACTGTCTGCTGCCCTCAAACCTGGCAGATGCACGGTTACGATGCGCCCATCTACACCAACGTAAC
CTATCCCATTACGGTCAATCCGCCGTTTGTTCACGGAGAATCCGACGGGTGTTTACTCGCTCACATTT
AATGTTGATGAAGCTGGCTACAGGAAGGCCAGCGCAATTATTTTGTAGTGGCGTTAACTCGGCGCTTTC
ATCTGTGGTGCAACGGGCGTGGGTGCGTTACGGCCAGGACAGTCGTTTGCCGTCTGAATTTGACCTGAG
CGCATTTTTACGCGCCGAGAAAACCGCCTCGCGGTGATGGTGCTGCGTTGGAGTGACGGCAGTTATCTG
GAAGATCAGGATATGTGGCGGATGAGCGGCATTTTCCGTGACGTCTCGTTGCTGCATAAACCGACTACAC
AAATCAGCGATTTCCATGTTGCCACTCGCTTTAATGATGATTTTACGCCGCGCTGTACTGGAGGCTGAAGT
TCAGATGTGCGGCGAGTTGCGTGACTACCTACGGGTAACAGTTTCTTTATGGCAGGGTGAAACGCAGGTC
GCCAGCGGCACCGCGCCTTTCGGCGGTGAAATTATCGATGAGCGTGGTGGTTATGCCGATCGCGTACAC
TACGTCTGAACGTGCAAAAACCCGAAACTGTGGAGCGCCGAAATCCCGAATCTCTATCGTGCGGTGGTTGA
ACTGCACACCGCGACGGCACGCTGATTGAAGCAGAAGCCTGCGATGTGCGTTTCCGCGAGGTGCGGATT
GAAAATGGTCTGCTGCTGAACGGCAAGCGTTGCTGATTTCGAGGCGTTAACCGTCACGAGCATC
CTCTGCATGGTCAGGTCATGGATGAGCAGACGATGGTGCAGGATATCCTGCTGATGAAGCAGAACCACTT
TAACGCCGTGCGCTGTTTCGCATTATCCGAACCATCCGCTGTGGTACACGCTGTGCGACCGCTACGGCCTG
TATGTGGTGGATGAAGCCAATATTGAAACCCACGGCATGGTGCCAATGAATCGTCTGACCGATGATCCGC
GCTGGCTACCGCGGATGAGCGAACGCGTAACGCGAATGGTGCAGCGCGATCGTAATACCCGAGTGATGAT
CATCTGGTCTGCTGGGGAATGAATCAGGCCACGGCGCTAATCAGACGCGCTGTATCGCTGGATCAAATCT
GTCGATCCTTCCCGCCCGGTGCAGTATGAAGGCGGCGGAGCCGACACCACGGCCACCGATATTATTTGCC
CGATGTACGCGCGCGTGGATGAAGACCAGCCCTTCCCGGCTGTGCCGAAATGGTCCATCAAAAAATGGCT
TTCGCTACCTGGAGAGACGCGCCCGCTGATCCTTTGCGAATACGCCACGCGATGGGTAAACAGTCTTGGC
GGTTTCGCTAAATACTGGCAGGCGTTTCGTCAGATCCCGGTTTACAGGGCGGCTTCGCTCTGGGACTGGG
TGGATCAGTCGCTGATTAAATATGATGAAAACGGCAACCCGTGGTTCGGCTTACGGCGGTGATTTTGGCGA
TACGCCGAACGATCGCCAGTTCTGTATGAACGGTCTGGTCTTTGCCGACCGCACGCGCATCCAGCGCTG
ACGGAAGCAAAACACCAGCAGCAGTTTTTCCAGTTCCGTTTATCCGGGCAAACCATCGAAGTGACCAGCG
AATACCTGTTCCGTCATAGCGATAACGAGCTCCTGCACTGGATGGTGGCGCTGGATGGTAAGCCGCTGGC
AAGCGGTGAAGTGCTCTGGATGTGCTCCACAAGGTAAACAGTTGATTGAACTGCCTGAACTACCGCAG
CCGGAGAGCGCCGGGCAACTCTGGCTCACAGTACGCGTAGTGCAACCGAACGCGACCGCATGGTCAGAAAG
CCGGGCACATCAGCGCCTGGCAGCAGTGGCGTCTGGCGGAAAACCTCAGTGTGACGCTCCCCGCCGCGTC
CCACGCCATCCCGCATCTGACCACCAGCGAAATGGATTTTTGCATCGAGCTGGGTAATAAGCGTTGGCAA
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Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

TTTAACCGCCAGTCAGGCTTTCTTTTCACAGATGTGGATTGGCGATAAAAAACAACCTGCTGACGCCGCTGC  
GCGATCAGTTACCCGTCACCGCTGGATAACGACATTGGCGTAAGTGAAGCGACCCGATTGACCTAA  
CGCCTGGGTGCAACGCTGGAAGGCGGCGGCCATTACCAGGCCGAAGCAGCGTTGTTGCAGTGCACGGCA  
GATACACTTGCTGATGCGGTGCTGATTACGACCGCTCACGCGTGGCAGCATCAGGGGAAAACCTTATTTA  
TCAGCCGGAACCTACCGGATTGATGGTAGTGGTCAAATGGCGATTACCGTTGATGTTGAAGTGGCGAG  
CGATACACCGCATCCGGCGCGGATTGGCCTGAACTGCCAGCTGGCGCAGGTAGCAGAGCGGGTAAACTGG  
CTCGGATTAGGGCCGCAAGAAAACCTATCCCGACCGCCTTACTGCCGCCTGTTTTGACCGCTGGGATCTGC  
CATTGTGACAGATGTATACCCCGTACGTCTTCCCGAGCGAAAACGGTCTGCGCTGCGGGACCGCGCAATT  
GAATTATGGCCACACACAGTGGCGCGCGGACCTTCCAGTTCAACATCAGCCGCTACAGTCAACAGCAACTG  
ATGGAACACAGCCATCGCCATCTGCTGCACGCGGAAGAAGGCACATGGCTGAATATCGACGGTTTCCATA  
TGGGGATTGGTGGCGACGACTCCTGGAGCCCGTCAGTATCGGCGGAGTTCCAGCTGAGCGCCGGTTCGCTA  
CCATTACAGTTGGTCTGGTGTCAAAAACTAAGGGTGGGCGCGCCGACCCAGCTTTCTTGTAACAAAGTG  
GTTGATCTAGAGGGCCCGCGGTTTCGAAGGTAAGCCTATCCCTAACCTCTCCTCGGTCTCGATTCTACGC  
GTACCGGTTAGTAATGAGTTTAAACGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAA  
CCCGCGCTATGACGGCAATAAAAAAGACAGAATAAAACGCACGGGTGTTGGGTGCTTTGTTTCATAAACCGC  
GGGTTCCGTCCCAGGGCTGGCACTCTGTGATACCCACCGAGACCCATTGGGGCCAATACGCCCCGCT  
TTCTTCTTTTCCCCACCCACCCCAAGTTCCGGTGAAGGCCAGGGCTCGCAGCCAACGTCGGGGCG  
GCAGGCCCTGCCATAGCAGATCCGATTTCGACAGATCACTGAAATGTGTGGGCGTGGCTTAAGGGTGGGAA  
AGAATATATAAGGTGGGGTCTTATGTAGTTTGTATCTGT'TTGCAGCAGCCGCCGCCCATGAGCAC  
CAACTCGTTTGTATGGAAGCATTGTGAGCTCATATTTGACAACGCGCATGCCCCATGGGCCGGGTGCGT  
CAGAATGTGATGGGCTCCAGCATTGATGGTCGCCCCGTCCTGCCCGCAAACCTCTACTACCTTGACCTACG  
AGACCGTGTCTGGAACGCCGTTGGAGACTGCAGCCTCCGCCGCCGCTTCAGCCGCTGCAGCCACCGCCCG  
CGGGATTGTGACTGACTTTGCTTTCTGAGCCCGCTTGAAGCAGTGCAGCTTCCCGTTCATCCGCCCGC  
GATGACAAGTTGACGGCTCTTTTGGCACAATTGGATTCTTTGACCCGGGAACCTTAATGTCGTTTCTCAGC  
AGCTATTTGGATCTGCGCCAGCAGGTTCTGCCCCGAAGGCTTCTCCCTCCCAATGCGGTTTAAACAT  
AATAAAAAACAGACTCTGTTGGATTGGATCAAGCAAGTGTCTTGCTGTCTTATTTAGGGGTTTG  
CGCGCGCGGTAGGCCCCGGGACACGCGTCTCGGTCTGAGGGTCTGTGTATTTTTTCCAGGACGTGGT  
AAAGGTGACTCTGGATGTTTCAGATACATGGGCATAAGCCCGTCTCTGGGGTGGAGGTAGCACCACTGCAG  
AGCTTCATGCTGCGGGGTGGTGTGTAGATGATCCAGTCTGATGAGGAGCGCTGGGCGTGGTGCCTAAAA  
ATGTCTTTTCAGTAGCAAGCTGATTGCCAGGGGACGGCCCTTGGTGTAAAGTGTTTACAAAGCGGTAAAGCT  
GGGATGGGTGCATACGTGGGGATATGAGATGCATCTTGGACTGTATTTTTAGGTTGGCTATGTTCCACGC  
CATATCCCTCCGGGGATTTCATGTTGTGCAGAACCACAGCACAGTGTATCCGGTGCACCTTGGGAAATTTG  
TCATGTAGCTTAGAAGGAAATGCGTGGAAGAACTTGGAGACGCCCTTGTGACCTCCAAGATTTTCCATGC  
ATTCGTCCATAATGATGGCAATGGGCCACGGGCGCGGCTGGGCGAAGATATTTCTGGGATCACTAAC  
GTCATAGTTGTGTTTCCAGGATGAGATCGTCATAGGCCATTTTTTACAAAGCGCGGCGGAGGTGACAGC  
TGCGGTATAATGGTTCCATCCGGCCCCAGGGGCGTAGTTACCCTCACAGATTTGCATTTCCACGCTTTGA  
GTTTCAGATGGGGGATCATGTCTACCTGCGGGGCGATGAAGAAAACGGTTTCCGGGGTAGGGGAGATCAG  
CTGGGAAGAAAGCAGGTTCTGAGCAGCTGCGACTTACCGCAGCCGGTGGGCCCCGTAATCACACCTATT  
ACCGGGTGCAACTGGTAGTTAAGAGAGCTGCAGCTGCCGTTCATCCCTGAGCAGGGGGGCCACTTCGTTAA  
GCATGTCCCTGACTCGCATGTTTCCCTGACCAAATCCGCCAGAAGGCGCTCGCCGCCAGCGATAGCAG  
TTCTTGCAAGGAAGCAAAGTTTTTCAACGGTTTGAGACCGTCCGCCGTAGGCATGCTTTTGAGCGTTTGA  
CCAAGCAGTTCCAGGCGGTCCCACAGCTCGGTACCTGCTCTACGGCATCTCGATCCAGCATATCTCCTC  
GTTTCGCGGGTTGGGGCGGCTTTCGCTGTACGGCAGTAGTCCGTGCTCGTCCAGACGGGCCAGGGTCATG  
TCTTTCCACGGGCGCAGGGTCTCTCGTCAGCGTAGTCTGGGTACGGTGAAGGGGTGCGCTCCGGGCTGCG  
CGCTGGCCAGGGTGCCTTGAGGCTGGTCTGTGTTGCTGAAGCGCTGCCGGTCTTCGCCCTGCGCGTC  
GGCCAGGTAGCATTTGACCATGGTGTTCATAGTCCAGCCCCCTCCGCGGCGTGGCCCTTGGCGCGCAGCTTG  
CCCTTGAGAGAGGCGCCGACAGAGGGGAGTGCAGACTTTTGAGGGCGTAGAGCTTGGGCGCGAGAAATA  
CCGATTCCGGGGAGTAGGCATCCGCGCCGAGGCCCGCAGACGGTCTCGCATTCCACGAGCCAGGTGAG  
CTCTGGCCGTTCCGGGGTCAAAAACAGGTTTCCCCCATGCTTTTTGATGCGTTTCTTACCTCTGGTTTCC  
ATGAGCCGGTGTCCACGCTCGGTGACGAAAAGGCTGTCCGTGTCCCGTATACAGACTTGAGAGGCCTGT  
CCTCGAGCGGTGTTCCGCGGTCTCTCTCGTATAGAACTCGGACCACTCTGAGACAAAGGCTCGCGTCCA  
GGCCAGCACGAAGAGGCTCAAGTGGGAGGGGTAGCGGTGCTTGTCCACTAGGGGGTCCACTCGCTCCAGG  
GTGTGAAGACATGTGCGCCCTCTTCGGCATCAAGGAAGGTGATTGGTTTGTAGGTGATAGGCCACGTGAC  
CGGGTGTCTCTGAAGGGGGGCTATAAAAGGGGTGGGGGCGCGTTCGTCTCTACTCTCTTCCGCATCGCT

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

GTCTGCGAGGGCCAGCTGTTGGGGTGAGTACTCCCTCTGAAAAGCGGGCATGACTTCTGCGCTAAGATTG  
TCAGTTTCCAAAAACGAGGAGGATTTGATATTACCTGGCCCGCGGTGATGCCTTTGAGGGTGCCGCAT  
CCATCTGGTCAGAAAAGACAATCTTTTTGTTGTCAAGCTTGGTGGCAAACGACCCGTAGAGGGCGTTGGA  
CAGCAACTTGGCGATGGAGCGCAGGGTTTGGTTTTTGTGCGCATCGGCGCGCTCCTTGGCCCGCATGTTT  
AGCTGCACGTATTTCGCGCGCAACGCACCGCCATTTCGGGAAAGACGGTGGTGGCTCGTTCGGGCACCAAGT  
GCACGCGCAACCGCGGTTGTGACGGGTGACAAGGTCAACGCTGGTGGCTACCTCTCCGCGTAGGCGCTC  
GTTGGTCCAGCAGAGGCGGCCGCCCTTTCGCGGAGCAGAATGGCGGTAGGGGGTCTAGCTGCGTCTCGTCC  
GGGGGGTCTGCGTCCACGGTAAAGACCCCGGGCAGCAGGCGCGCGTGAAGTAGTCTATCTTGATCTCCTT  
GCAAGTCTAGCGCTGCTGCCATGCGCGGGCGGCAAGCGCGCGCTCGTATGGGTGAGTGGGGGACCCCA  
TGGCATGGGGTGGGTGAGCGCGGAGGCGTACATGCCGCAAATGTCTGTAACGTAGAGGGGCTCTCTGAGT  
ATTCCAAGATATGTAGGGTAGCATCTTCCACCGCGGATGCTGGCGCGCACGTAATCGTATAGTTTCGTGCG  
AGGGAGCGAGGAGGTTCGGACCGAGGTTGCTACGGGCGGGCTGCTCTGCTCGGAAGACTATCTGCCTGAA  
GATGGCATGTGAGTTGGATGATATGTTGGACGCTGGAAGACGTTGAAGCTGGCGTCTGTGAGACCTACC  
GCGTCACGCACGAAGGAGGCGTAGGAGTTCGCGCAGCTTGTGACAGCTCGGCGGTGACCTGCACGTCTA  
GGGCGCAGTAGTCCAGGGTTTCTTGTATGATGTCTATCTTATCTGTCCCTTTTTTTTCCACAGCTCGCG  
GTTGAGGACAACTCTTCGCGGTCTTTCAGTACTCTTGGATCGGAAACCGTCCGCGCTCCGAACGGTAA  
GAGCCTAGCATGTAGAACTGGTTGACGGCCTGGTAGGCGCAGCATCCCTTTTCTACGGGTAGCGCGTATG  
CCTGCGCGGCTTCCGAGCGAGGTGTGGGTGAGCGCAAAGGTGTCCCTGACCATGACTTTGAGGTACTG  
GTATTTGAAGTCAGTGTCTGTCGTCATCCGCCCTGCTCCAGAGCAAAAAGTCCGTGCGCTTTTTTGAACGC  
GGATTTGGCAGGGCGAAGGTGACATCGTTGAAGAGTATCTTTCCGCGCGAGGCATAAAGTTGCGTGTGA  
TGCGGAAGGGTCCCGGCACCTCGGAACGGTTGTTAATTACCTGGGCGCGAGCACGATCTCGTCAAAGCC  
GTTGATGTTGTGGCCCAATGTAAAGTTCCAAGAAGCGCGGGATGCCCTTGATGGAAGGCAATTTTTTA  
AGTTCCTCGTAGGTGAGCTCTTCAGGGGAGCTGAGCCCGTGTCTGAAAGGGGCCAGTCTGCAAGATGAG  
GGTTGGAAGCGACGAATGAGCTCCACAGGTACGGGCCATTAGCATTTGCAGGTGGTTCGCGAAAGGTCCCT  
AAACTGGCGACCTATGGCCATTTTTTCTGGGGTGATGCAGTAGAAGGTAAGCGGGTCTGTTCCAGCGG  
TCCCCTCAAGGTTTCGCGGTAGGTCTCGCGCGGCAGTCACTAGAGGCTCATCTCCGCGCAACTTTCATGA  
CCAGCATGAAGGGCACGAGCTGCTTCCCAAAGGCCCCCATCCAAGTATAGGTCTCTACATCGTAGGTGAC  
AAAGAGACGCTCGGTGCGAGGATGCGAGCCGATCGGGAAGAACTGGATCTCCCGCCACCAATTGGAGGAG  
TGGCTATTGATGTGGTGAAGTAGAAGTCCCTGCGACGGGCCGAACACTCGTGTGCTGGCTTTGTAAAAAC  
GTGCGCAGTACTGGCAGCGGTGCACGGGCTGTACATCCTGCACGAGGTTGACCTGACGACCGCGCACAAG  
GAAGCAGAGTGGGAATTTGAGCCCCTCGCCTGGCGGGTTTGGCTGGTGGTCTTCTACTTCGGCTGCTTGT  
CCTTGACCGTCTGGCTGCTCGAGGGGAGTTACGGTGGATCGGACCACACGCGCGCGAGCCCCAAAGTCC  
AGATGTCCGCGCGCGCGGTCGGAGCTTGATGACAACATCGCGCAGATGGGAGCTGTCCATGGTCTGGAG  
CTCCCGCGCGCTCAGGTACGGCGGGAGCTCCTGCAGTTTACCTCGCATAGACGGGTACAGGCGCGGGCT  
AGATCCAGGTGATGACTTAATTTCCAGGGGCTGGTTGGTGGTGGCGCGTGCATGGCTTGCAAGAGCGCGCATC  
CCCGCGCGCGACTACGGTACCGCGCGCGGGCGGTGGGCCGCGGGGGTGTCTTGGATGATGCATCTAA  
AAGCGGTGACGCGGGCGAGCCCCCGAGGTAGGGGGGGCTCCGACCCGCGGGAGAGGGGGCAGGGGCA  
CGTCCGCGCGCGCGCGGGCAGGAGCTGGTGTGCTGCGCGCTAGGTTGCTGGCGAACGCGACGACGCGCG  
GTTGATCTCCTGAATCTGGCGCCTCTGCGTGAAGACGACGGGCCCGGTGAGCTTGAGCCTGAAAGAGAGT  
TCGACAGAATCAATTTCCGTTGCTGTTGACGGCGGCCTGGCGCAAAATCTCCTGCACGTCTCCTGAGTTGT  
CTTGATAGGCGATCTCGGCCATGAACGTCTGATCTCTTCTCCTGGAGATCTCCGCGTCCGGCTCGCTC  
CACGTTGGCGGCGAGGTTCGTTGAAATGCGGGCCATGAGCTGCGAGAAGGCGTTGAGGCCTCCCTCGTTC  
CAGACGCGGCTGTAGACCACGCCCCCTTCGGCATCGCGGGCGCATGACCACCTGCGCGAGATTGAGCT  
CCACGTGCCGGGCGAAGACGCGGTAGTTTCGACGGCGCTGAAAGAGGTAGTTGAGGGTGGTGGCGGTGTG  
TTCTGCCACGAAGAAGTACATAAACCAGCGTCGCAACGTGGATTTCGTTGATATCCCCAAGGCCTCAAGG  
CGCTCCATGGCCTCGTAGAAGTCCACGGCGAAGTTGAAAACTGGGAGTTGCGCGCCGACACGGTTAACT  
CCTCCTCCAGAAGACGGATGAGCTCGGCGACAGTGTGCGCACCTCGCGCTCAAAGGCTACAGGGGCCCTC  
TTCTTCTTCTCAATCTCCTCTTCCATAAGGGCCTCCCTTCTTCTTCTTCTGCGCGGCGGTGGGGGAGGG  
GGGACACGGCGGCGACGACGGCGCACCGGGAGGCGGTGACAAAGCGCTCGATCATCTCCCCGCGCGGAC  
GGCGCATGGTCTCGGTGACGGCGCGGCCGTTCTCGCGGGGGCGCAGTTGGAAGACGCGGCCCGTCATGTC  
CCGGTTATGGGTTGGCGGGGGGCTGCCATGCGGCAGGGATACGGCGCTAACGATGCATCTCAACAATTGT  
TGTGTAGTACTCCGCCGCCGAGGGACCTGAGCGAGTCCGATCGACCGGATCGGAAAACCTCTCGAGAA  
AGGCGCTAACCAGTCAAGTTCGCAAGGTAGGCTGAGCACCGTGGCGGGCGGCAGCGGGCGGCGGTCTGGG  
GTTGTTTCTGGCGGAGGTGCTGCTGATGATGTAATTAAAGTAGGCGGTCTTGAGACGGCGGATGGTTCGAC

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

AGAAGCACCATGTCCTTGGGTCCGGCCTGCTGAATGCGCAGGCGGTTCGGCCATGCCCCAGGCTTCGTTTT  
GACATCGGCGCAGGTCTTTGTAGTAGTCTTGATGAGCCTTTCTACCGGCACTTCTTCTCTCCTTCCTC  
TTGTCTGTCATCTCTTGTCATCTATCGCTGCGGCGGCGGCGGAGTTTGGCCGTAGGTGGCGCCCTCTTCCT  
CCCATGCGTGTGACCCCGAAGCCCTCATCGGCTGAAGCAGGGCTAGGTTCGGCGACAACGCGCTCGGCTA  
ATATGGCCTGCTGCACCTGCGTGAGGGTAGACTGGAAGTCATCCATGTCCACAAAGCGGTGGTATGCGCC  
CGTGTGATGGTGTAAGTGCAAGTTGGCCATAACGGACAGTTAACGGTCTGGTGACCCGGCTGCGAGAGC  
TCGGTGTAACCTGAGACGCGAGTAAGCCCTCGAGTCAAATACGTAGTTCGTTGCAAGTCCGCACCAGGTACT  
GGTATCCACCAAAAAGTGCGGCGGCGGCTGGCGGTAGAGGGGCCAGCGTAGGGTGGCCGGGGCTCCGGG  
GGCGAGATCTTCCAACATAAGGCGATGATATCCGTAGATGTACCTGGACATCCAGGTGATGCGGCGGCG  
GTGGTGAGAGCGCGCGGAAAGTCGCGGACGCGGTTCCAGATGTTGCGCAGCGGCAAAAAGTGCTCCATGG  
TCGGGACGCTCTGGCCGGTCAGGCGCGCGCAATCGTTGACGCTCTAGACCGTGCAAAAGGAGAGCCTGTA  
AGCGGGCACTCTTCGTGGTCTGGTGGATAAATTTCGAAGGGTATCATGGCGGACGACCGGGGTTTCGAGC  
CCCGTATCCGGCCGTCCGCCGTGATCCATGCGGTTACCGCCCGGTGTCGAACCCAGGTGTGCGACGTCA  
GACAACGGGGGAGTGCTCCTTTTGGCTTCCTTCCAGGCGCGGCGGCTGCTGCGCTAGCTTTTGGCCAC  
TGGCCGCGCGCAGCGTAAGCGGTTAGGCTGGAAGCGAAAGCATTAAGTGGCTCGCTCCCTGTAGCCGGA  
GGGTTATTTTCCAAGGGTTGAGTCGCGGGACCCCGGTTTCGAGTCTCGGACCGGCCGGACTGCGGCGAAC  
GGGGGTTTGCTTCCCGTCATGCAAGACCCCGCTTGCAAATTCTCCGAAACAGGGACGAGCCCTTTT  
TTGCTTTTCCCGAGATGCATCCGGTGCTGCGGCAGATGCGCCCCCTCCTCAGCAGCGGCAAGAGCAAGAG  
CAGCGGCAGACATGCAGGGCACCCCTCCCTCCTCCTACCGCGTCAGGAGGGGCGACATCCGCGGTTGACG  
CGGCAGCAGATGGTGATTACGAACCCCGCGGCGCCGGGCCCGGCACTACCTGGACTTGAGAGAGGGCGA  
GGGCTTGGCGCGGCTAGGAGCGCCCTCTCCTGAGCGGTACCCAAGGGTGCAGCTGAAGCGTGATACGCGT  
GAGGCGTACGTGCCGCGGCAGAACCTGTTTTCGCGACCGCGAGGGAGAGGAGCCCGAGGAGATGCGGGATC  
GAAAGTTCCACGCAGGGCGCGAGCTGCGGCATGGCCTGAATCGCGAGCGGTTGCTGCGCGAGGAGGACTT  
TGAGCCCGACGCGGAACCGGGATTAGTCCCGCGCGCGCACACGTGGCGGCCCGCGACCTGGTAACCGCA  
TACGAGCAGACGGTGAACCAGGAGATTAACTTTCAAAAAGCTTTAACAACACAGTGCCTACGCTTGTGG  
CGCGCAGGAGGTTGGCTATAGGACTGATGCATCTGTGGGACTTTGTAAGCGCGCTGGAGCAAAACCCAAA  
TAGCAAGCCGCTCATGGCGCAGCTGTTCCTTATAGTGCAGCACAGCAGGGACAACGAGGCATTGAGGGAT  
GCGCTGCTAAACATAGTAGAGCCCGAGGGCGGCTGGCTGCTCGATTTGATAAACATCCTGCAGAGCATAG  
TGGTGCAGGAGCGCAGCTTGAGCCTGGCTGACAAGGTGGCCGCCATCACTATTCCATGCTTAGCCTGGG  
CAAGTTTACGCCCCAAGATATACCATACCCCTTACGTTCCCATAGACAAGGAGGTAAAGATCGAGGGG  
TTCTACATGCGCATGGCGCTGAAGGTGCTTACCTTGAGCGACGACCTGGGCGTTTATCGCAACGAGCGCA  
TCCACAAGGCCGTGAGCGTGAGCCGGCGGCGCGAGCTCAGCGACCGCGAGCTGATGCACAGCCTGCAAG  
GGCCCTGGCTGGCACGGGCGAGCGCGATAGAGAGGCCGAGTCTACTTTGACGCGGGCGCTGACCTGCGC  
TGGGCCCCAAGCCGACGCGCCCTGGAGGCAGCTGGGGCCGACCTGGGCTGGCGGTGGCACCCGCGCGCG  
CTGGCAACGCTCGGCGCGCTGGAGGAATATGACGAGACGATGAGTACGAGCCAGAGGACGGCGAGTACTA  
AGCGGTGATGTTTCTGATCAGATGATGCAAGACGCAACGAGCCCGCGGTGCGGGCGGCTGCGAGACC  
AGCCGTCCGGCCTTAACCTCCACGGACGACTGGCGCCAGGTTCATGGACCGCATCATGTGCTGACTGCGCG  
CAATCCTGACGCGTTCCGGCAGCAGCCGAGGCCAACCGGCTCTCCGCAATTCTGGAAGCGGTGGTCCCCG  
GCGCGCGCAAACCCACGCACGAGAAGGTGCTGGCGATCGTAAACGCGCTGGCCGAAACAGGGCCATCC  
GGCCCGACGAGGCCGCGCTGGTCTACGACGCGCTGCTTACGCGCGTGGCTCGTTACAACAGCGGCAACGT  
GCAGACCAACCTGGACCGGCTGGTGGGGGATGTGCGCGAGGCCGTGGCGCAGCGTGAGCGCGCGCAGCAG  
CAGGGCAACCTGGGCTCCATGGTTGCACTAAACGCCTTCTGAGTACACAGCCCGCAACGTGCCGCGGG  
GACAGGAGGACTACACCACTTTGTGAGCGCACTGCGGCTAATGGTGACTGAGACACCGCAAAAGTGAGGT  
GTACCAGTCTGGGCCAGACTATTTTTCAGACCAAGTAGACAAGGCCTGCAGACCGTAAACCTGAGCCAG  
GCTTTTCAAAAACCTTGACAGGGGCTGTGGGGGTGCGGGCTCCACAGGCGACCGCGGACCGTGCTAGCT  
TGCTGACGCCCCAATCGCGCCTGTTGCTGCTGCTAATAGCGCCCTTACGGACAGTGGCAGCGTGTCCCCG  
GGACACATACCTAGGTCACCTTGTGACACTGTACCGCGAGGCCATAGGTGAGGCGCATGTGGACGAGCAT  
ACTTTCCAGGAGATTACAAGTGTGAGCCGCGCGCTGGGGCAGGAGGACACGGGCGAGCCTGGAGGCAACCC  
TAAACTACCTGCTGACCAACCGGCGGCGAGAAGATCCCTCGTTGCACAGTTTAAACAGCGAGGAGGAGCG  
CATTTTGCCTACGTGCAGCAGAGCGTGAGCCTTAACCTGATGCGCGACGGGGTAACGCCCAGCGTGCGG  
CTGGACATGACCGCGCGCAACATGGAACCGGGCATGTATGCCTCAAACCGGCCGTTTATCAACCGCCTAA  
TGGACTACTTGATCGCGCGGCCGCGGTGAACCCCGAGTATTTACCAATGCCATCTTGAACCCGCACTG  
GCTACCGCCCCCTGGTTTCTACACCGGGGATTCGAGGTGCCCGAGGGTAACGATGGATTCCCTTGGGAC  
GACATAGACGACAGCGTGTTTTTCCCCGCAACCGCAGACCCTGCTAGAGTTGCAACAGCGCGGAGCGAGCAG

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

AGGCGGCGCTGCGAAAGGAAAGCTTCCG CAGGCCAAGCAGCTTGTCCGATCTAGGCGCTGCGGCCCCGCG  
GTCAGATGCTAGTAGCCCATTTCCAAGCTTGATAGGGTCTCTTACCAGCACTCGCACCACCCGCCCCGCGC  
CTGCTGGGCGAGGAGGAGTACCTAAACAACCTCGTGTGTCAGCCGAGCGCGAAAAAACCTGCCTCCGG  
CATTTCCCAACAACGGGATAGAGAGCCTAGTGGACAAGATGAGTAGATGGAAGACGTACGCGCAGGAGCA  
CAGGGACGTGCCAGGCCCCGCGCCCCGCCACCCGTCGTCAAAGGCACGACCGTCAGCGGGGTCTGGTGTGG  
GAGGACGATGACTCGGCAGACGACAGCAGCGTCTTGGATTGGGAGGGAGTGGCAACCCGTTTGGCGACC  
TTCGCCCCAGGCTGGGGAGAATGTTTTAAAAAAGCATGATGCAAAATAAAAACTCACCAAGGC  
CATGGCACCGAGCGTTGGTTTTCTGTATTCCCTTAGTATGCGGCGCGCGCGATGTATGAGGAAGGT  
CTCTCCCTCCTACGAGAGTGTGGTGAGCGCGCGGCCAGTGGCGGCGCGCTGGGTTCTCCCTTCGATGC  
TCCCCTGGACCCGCGTTTGTGCTCCGCGGTACCTGCGGCCTACCGGGGGAGAAACAGCATCCGTTAC  
TCTGAGTTGGCACCCCTATTTCGACACCACCGTGTGTACCTGGTGGACAACAAGTCAACGGATGTGGCAT  
CCCTGAACCTACCAGAACGACCACAGCAACTTTCTGACCACGGTCATTCAAAACAATGACTACAGCCCGGG  
GGAGGCAAGCACACAGACCATCAATCTTGACGACCGGTGCGACTGGGGCGGCGACCTGAAAACCATCCTG  
CATAACCATGCCAAATGTGAACGAGTTCATGTTTACCAATAAGTTTAAGGCGCGGGTGATGGTGTGCG  
GCTTGCCTACTAAGGACAATCAGGTGGAGCTGAAATACGAGTGGGTGGAGTTCACGCTGCCCCGAGGGCAA  
CTACTCCGAGACCATGACCATAGACCTTATGAACAACGCGATCGTGGAGCACTACTTGAAAGTGGGCAGA  
CAGAACGGGGTTCTGGAAAGCGACATCGGGGTAAAGTTTGACACCCGCAACTTCAGACTGGGGTTTGACC  
CCGTCACTGGTCTTGTTCATGCCTGGGGTATATACAAACGAAGCCTTCCATCCAGACATCATTTTGTGCGC  
AGGATGCGGGGTGGACTTCACCCACAGCCGCTGAGCAACTTGTGGGCATCCGCAAGCGGCAACCCCTTC  
CAGGAGGGCTTTAGGATCACCTACGATGATCTGGAGGGTGGTAACATTCCCGCACTGTTGGATGTGGACG  
CCTACCAGGCGAGCTTGAAAGATGACACCGAACAGGGCGGGGTGGCGCAGGCGGCAGCAACAGCAGTGG  
CAGCGGCGCGGAAGAGAATCCAACGCGGCAGCCGCGGCAATGCAGCCGGTGGAGGACATGAACGATCAT  
GCCATTGCGGCGACACCTTTGCCACACGGGTGAGGAGAAGCGCGCTGAGGCCGAAGCAGCGGCCGAAG  
CTGCCGCCCCGCTGCGCAACCCGAGGTGAGAAAGCCTCAGAAGAAACCGGTGATCAAACCCCTGACAGA  
GGACAGCAAGAAACGCAGTTACAACCTAATAAGCAATGACAGCACCTTCACCCAGTACCGCAGCTGGTAC  
CTTGACATACACTACGGCGACCCCTCAGACCGGAATCCGCTCATGGACCCTGCTTTGCACTCCTGACGTAA  
CCTGCGGCTCGGAGCAGGTCTACTGCTGCTTGGCCAGACATGATGCAAGACCCCGTGACCTTCCGCTCCAC  
GCGCCAGATCAGCAACTTTCCGGTGGTGGGCGCCGAGCTGTTGCCCGTGCACTCCAAGAGCTTCTACAAC  
GACCAGGCCGTCTACTCCCAACTCATCCGCCAGTTTACCTCTCTGACCCACGTGTTCAATCGCTTTCCCG  
AGAACCAGATTTTGGCGCGCCCGCCAGCCCCACCATCACACCGTCAGTGAACAGTTCTCTGCTCTCAC  
AGATCACGGGACGCTACCGCTGCGCAACAGCATCGGAGGAGTCCAGCGAGTGACCATTACTGACGCCAGA  
CGCCGCACCTGCCCCCTACGTTTACAAGGCCCTGGGCATAGTCTCGCGCGCGTCTATCGAGCCGCACTT  
TTTGAGCAAGCATGTCCATCCTTATATCGCCCAGCAATAACACAGGCTGGGGCCTGCGCTTCCCAAGCAA  
GATGTTTGGCGGGGCCAAGAAGCGCTCCGACCAACACCCAGTGCAGCTGCGCGTGCAGCGGCACTACCGCGCGCC  
TGGGCGCGCACAAACGCGCGCCGCACTGGGCGCACCCAGTGCATGACGCCATCGACGCGGTGGTGAGG  
AGGCGCGCAACTACACGCCACGCCCGCCACAGTGTCCACAGTGGACGCGGCCATTTCAGACCGTGGTGCG  
CGGAGCCCGCGCTATGCTAAAATGAAGAGACGGCGGAGGCGGTAGCACGTGCCACCGCCGCGGACCC  
GGCACTGCCGCCCAACGCGCGGCGGCGGCCCTGCTTAACCGCGCACGTGCGACCGGCCGACGGCGGCCA  
TGCGGGCCGCTCGAAGGCTGGCCGCGGGTATTGTCACTGTGCCCCCAGGTCCAGGCGACGAGCGGCCG  
CGCAGCAGCCGCGGCCATTAGTGCTATGACTCAGGGTTCGAGGGGCAACGTGTATTGGGTGCGCGACTCG  
GTTAGCGGCCTGCGCGTGCCGTGCGCACCCGCCCCCGCGCAACTAGATTGCAAGAAAAAACTACTTAG  
ACTCGTACTGTTGTATGTATCCAGCGGCGGCGCGCAACGAAGCTATGTCCAAGCGCAAAATCAAAGA  
AGAGATGCTCCAGGTCATCGCGCCGAGATCTATGGCCCCCGAAGAAGGAAGAGCAGGATTACAAGCCC  
CGAAAGCTAAAGCGGGTCAAAAAGAAAAAGATGATGATGATGAACCTTGACGACGAGGTGGAAGCTGC  
TGACGCTACCGCGCCAGGCGACGGGTACAGTGGAAAGGTGACGCGTAAACGTGTTTTGCGACCCGG  
CACCACCGTAGTCTTTACGCCCCGTGAGCGCTCCACCCGCACCTACAAGCGCGTGTATGATGAGGTGTAC  
GGCGACGAGGACCTGCTTGAGCAGGCCAACGAGCGCTCGGGGAGTTTGCTACGGAAGCGGCATAAGG  
ACATGCTGGCGTTGCCGCTGGACGAGGGCAACCCAACACCTAGCCTAAAGCCCGTAACACTGCAGCAGGT  
GCTGCCCGCGCTTGACACCGTCCGAAGAAAAGCGCGGCCTAAAGCGCGAGTCTGGTGACTTGGCACCCACC  
GTGCAGCTGATGGTACCCAAGCGCCAGCGACTGGAAGATGTCTTGAAAAAATGACCGTGGAACCTGGGC  
TGGAGCCCCGAGGTCCGCGTGCGGCCAATCAAGCAGGTGGCGCCGGGACTGGGCGTGACAGCCGTGGACGT  
TCAGATACCACTACCAAGTACCAAGTATTGCGCCACGCCACAGAGGGCATGGAGACACAAACGTCCCCG  
GTTGCTCAGCGGTGGCGGATGCCGCGGTGACGCGGTGCGTGGCGCGCGTCCAAGACCTCTACGGAGG  
TGCAACCGGACCCGTGGATGTTTCGCGTTTTCAGCCCCCGGCGCCGCGCGGTTTCGAGGAAGTACGGCGC

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

CGCCAGCGCGCTACTGCCGAATATGCCCTACATCCTTCCATTGCGCCTACCCCGGCTATCGTGGCTAC  
ACCTACCGCCCCAGAAGACGAGCAACTACCCGACGCCGAACCACCACTGGAACCCGCCGCCCGCTCGCC  
GTCGCCAGCCCGTGCTGGCCCCGATTTCCTGTCGCGAGGGTGGCTCGCGAAGGAGGCAGGACCCTGGTGTCT  
GCCAACAGCGCGCTACCAACCCAGCATCGTTTAAAAGCCGGTCTTTGTGGTTCTTGCAGATATGGCCCTC  
ACCTGCCGCTCCGTTTCCCGGTGCCGGGATTCCGAGGAAGAATGCACCGTAGGAGGGGCATGGCCGGCC  
ACGGCCTGACGGGCGGCATGCGTCTGTCGCCACCACCGCGCGCGCGCTCGCACCGTTCGCATGCGCGG  
CGGTATCCTGCCCCCTCCTTATTCACCTGATCGCCGCGCGGATTGGCGCGGTGCCCGGAATTGCATCCGTG  
GCCTTGCAAGCGCAGAGACACTGATTAACCAAGTTGCATGTGGAAAAATCAAAATAAAAAGTCTGGAC  
TCTCAGCTCGCTTGGTCTGTAACTATTTTGTAGAATGGAAGACATCAACTTTGCGTCTCTGGCCCCGC  
GACACGGCTCGCGCCCGTTTATGGGAACTGGCAAGATATCGGCACCAGCAATATGAGCGGTGGCGCCTT  
CAGCTGGGGCTCGCTGTGGAGCGGCATTAAAAATTTCCGTTCCACCGTTAAGAACTATGGCAGCAAGGCC  
TGGAACAGCAGCACAGGCCAGATGCTGAGGGATAAGTTGAAAGAGCAAAATTTCCAACAAAAGGTGGTAG  
ATGGCCTGGCCTCTGGCATTAGCGGGGTGGTGGACCTGGCCAACCAGGCAGTGCAAAATAAGATTAACAG  
TAAGCTTGATCCCCGCCCTCCCGTAGAGGAGCCTCCACCGGCCCGTGGAGACAGTGTCTCCAGAGGGGCGT  
GGCGAAAAGCGTCCGCGCCCCGACAGGGAAGAACTCTGGTGACGCAATAGACGAGCCTCCCTCGTACG  
AGGAGGCACTAAAGCAAGGCCTGCCACCACCCGTCCCATCGCGCCCATGGCTACCGGAGTGTGGGCCA  
GCACACACCCGTAAACGCTGGACCTGCCTCCCCCGCCGACACCCAGCAGAAACCTGTGCTGCCAGGCCCG  
ACCGCGTTGTTGTAAACCCGTCTAGCCGCGCGTCCCTGCGCCGCGCCGCGCAGCGGTCCGCGATCGTTGC  
GGCCCGTAGCCAGTGGCAACTGGCAAGCACACTGAACAGCATCGTGGGTCTGGGGGTGCAATCCCTGAA  
GCGCCGACGATGCTTCTGAATAGCTAACGTGTCTGTATGTGTGTATGCGTCCATGTGCGCGCCAGA  
GGAGCTGTGAGCCGCCGCGCGCCGCTTTCCAAGATGGCTACCCCTTCGATGATGCCGCGAGTGGTCTTA  
CATGCACATCTCGGGCCAGGACGCTTCGGAGTACCTGAGCCCCGGGCTGGTGCAGTTTGCCCGCGCCACC  
GAGACGTACTTCAGCCTGAATAACAAGTTTAGAAACCCACGGTGGCGCCTACGCACGACGTGACCACAG  
ACCGGTCCCAGCGTTTGACGCTGCGGTTTATCCCTGTGGACCGTGAGGATACTGCGTACTCGTACAAGGC  
GCGGTTACACCTAGCTGTGGGTGATAACCGTGTGCTGGACATGGCTTCCACGTACTTTGACATCCGCGGC  
GTGCTGGACAGGGGCCCTACTTTTAAGCCCTACTCTGGCACTGCCTACAACGCCCTGGCTCCCAAGGGTG  
CCCCAAATCCTTGCGAATGGGATGAAGCTGCTACTGCTCTTGAATAAACCTAGAAGAAGAGGACGATGA  
CAACGAAGACGAAGTAGACGAGCAAGCTGAGCAGCAAAAACTCACGTATTTGGGCAGGCGCCTTATTCT  
GGTATAAATATTACAAAGGAGGGTATTCAAATAGGTGTGCAAGGTCAAACACCTAAATATGCCGATAAAA  
CATTTCAACCTGAACCTCAAATAGGAGAATCTCAGTGGTACGAACTGAAATTAATCATGCAGCTGGGAG  
AGTCCTTAAAAAGACTACCCCAATGAAACCATGTTACGGTTTCATATGCAAAACCCACAAATGAAAATGGA  
GGGCAAGGCATTCTTGTAAGCAACAAAAATGGAAAGCTAGAAAGTCAAGTGGAAATGCAATTTTTCTCAA  
CTACTGAGGCGACCGCAGGCAATGGTGATAACTTGACTCCTAAAGTGGTATTGTACAGTGAAGATGTAGA  
TATAGAACACCCAGACACTCATTTCTTACATGCCACTATTAAAGGAAGGTAACCTACGAGAATAATGAT  
GGCCAACAATCTATGCCCAACAGGCCATAATTACATTTGCTTTTGGGACAATTTTATTGGTCTAATTATT  
ACAACAGCACGGGTAATATGGGTGTTCTGGCGGGCCAAGCATCGCAGTTGAATGCTGTTGTAGATTTGCA  
AGACAGAAACACAGAGCTTTTATACCAGCTTTTGCTTGATTCCATTGGTGATAGAACCAGGTACTTTTCT  
ATGTGGAATCAGGCTGTTGACAGCTATGATCCAGATGTTAGAATTATTGAAAATCATGGAACCTGAAGATG  
AACTTCCAAATTACTGCTTTTCCACTGGGAGGTGTGATTAATACAGAGACTTTACCAAGGTAAAACCTAA  
AACAGGTGAGGAAAATGGATGGGAAAAAGATGCTACAGAATTTTTCAGATAAAAATGAAATAAGAGTTGGA  
AATAATTTTGCCATGGAAATCAATCTAAATGCCAACCTGTGGAGAAATTTCTGTACTCCAACATAGCGC  
TGTATTTGCCCCACAAGCTAAAGTACAGTCCCTTCCAACGTAAAAATTTCTGATAACCCAAACACCTACGA  
CTACATGAACAAGCGAGTGGTGGCTCCCGGGTTAGTGGACTGCTACATTAACCTTGGAGCAGCTGGTCC  
CTTGACTATATGGACAACGTCAACCCATTTAACCACCACCGCAATGCTGGCCTGCGCTACCGCTCAATGT  
TGCTGGGCAATGGTTCGCTATGTGCCCTTCCACATCCAGGTGCCTCAGAAGTTCTTTGCCATTAAAAACCT  
CCTTCTCCTGCCGGGCTCATACACCTACGAGTGGAACCTCAGGAAGGATGTTAACATGGTTCCTGCAGAGC  
TCCCTAGGAAATGACCTAAGGGTTGACGGAGCCAGCATTAAGTTTGATAGCATTTGCCTTTACGCCACCT  
TCTTCCCCATGGCCCAACACCGCTCCACGCTTGAGGCCATGCTTAGAAACGACACCAACGACCAGTC  
CTTTAACGACTATCTCTCCGCCGCCAACATGCTCTACCCTATACCCGCCAACGCTACCAACGTGCCCATA  
TCCATCCCCCTCCCGCAACTGGGCGGCTTTCCGCGGCTGGGCCTTACGCGCCTTAAGACTAAGGAAACCC  
CATCACTGGGCTCGGGCTACGACCCTTATTACACCTACTCTGGCTCTATACCCTACCTAGATGGAACCTT  
TTACTCAACCAACCTTTAAGAAGGTGGCCATTACCTTTGACTCTTCTGTGCTGAGCTGGCCTGGCAATGAC  
CGCTGCTTACCCCCAACGAGTTTGAAATTAAGCGCTCAGTTGACGGGGAGGGTTACAACGTTGCCAGT  
GTAACATGACCAAGACTGGTTCTTGGTACAAATGCTAGCTAACTACAACATTGGCTACCAGGGCTTCTA



Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

TATCCCAGAGAGCTACAAGGACCGCATGTACTCCTTCTTTAGAAACTTCCAGCCCATGAGCCGTGAGGTG  
GTGGATGATACTAAATACAAGGACTACCAACAGGTGGGCATCCTACACCAACACAACAACTCTGGATTTG  
TTGGCTACCTTGCCCCACCATGCGCGAAGGACAGGCCTACCCTGCTAACTTCCCCTATCCGCTTATAGG  
CAAGACCGCAGTTGACAGCATTACCCAGAAAAAGTTTCTTTGCGATCGCACCCCTTTGGCGCATCCCATTC  
TCCAGTAACTTTATGTCCATGGGCGCACTCACAGACCTGGGCCAAAACCTTCTCTACGCCAACTCCGCCC  
ACGCGCTAGACATGACTTTTGAGGTGGATCCCATGGACGAGCCACCCTTCTTTATGTTTTGTTTGAAGT  
CTTTGACGTGGTCCGTGTGCACCGGCCGACCGCGCGTCATCGAAACCGTGTACCTGCGCACGCCCTTC  
TCGGCCGGCAACGCCACAACATAAAGAAGCAAGCAACATCAACAACAGCTGCCGCCATGGGCTCCAGTGA  
GCAGGAAGTGAAGCCATTGTCAAAGATCTTGGTTGTGGGCCATATTTTTTGGGCACCTATGACAAGCGC  
TTTTCCAGGCTTTGTTTTCTCCACACAAGCTCGCCTGCGCCATAGTCAATACGGCCGGTTCGCGAGACTGGGG  
GCGTACACTGGATGGCCTTTGCCTGGAACCCGCACTCAAAAACATGCTACCTCTTTGAGCCCTTTGGCTT  
TTCTGACCAGCGACTCAAGCAGGTTTACCAGTTTGAGTACGAGTCACTCCTGCGCCGTAGCGCCATTGCT  
TCTTCCCCGACCGCTGTATAACGCTGGAAAAGTCCACCCAAAGCGTACAGGGGCCAACTCGGCCGCCCT  
GTGGACTATTCTGCTGCATGTTTCTCCACGCCCTTGCCAACTGGCCCCAAACTCCCATGGATCACAACCC  
CACCATGAACCTTATTACCGGGGTACCCAACTCCATGCTCAACAGTCCCCAGGTACAGCCCACCCTGCGT  
CGCAACCAGGAACAGCTCTACAGCTTCTTGAGCGCCACTCGCCCTACTTCCGCAGCCACAGTGCAGCAGA  
TTAGGAGCGCCACTTCTTTTGTCACTTGAAAAACATGTAAAAATAATGTACTAGAGACACTTTCAATAA  
AGGCAAATGCTTTTATTTGTACACTCTCGGGTGATTATTTTACCCCCACCCTTGCCGTCTGCGCCGTTTAA  
AAATCAAAGGGGTTCTGCCGCGCATCGCTATGCGCCACTGGCAGGGACACGTTGCGATACTGGTGTTTAG  
TGCTCCACTTAACTCAGGCACAACCATCCGCGGCAGCTCGGTGAAGTTTTCACTCCACAGGCTGCGCAC  
CATCACCACGCGTTTAGCAGGTGCGGCGCCGATATCTTGAAGTGCAGTTGGGGCCTCCGCCCTGCGCG  
CGCGAGTTGCGATACACAGGGTTGCAGCACTGGAACACTATCAGCGCCGGGTGGTGCACGCTGGCCAGCA  
CGCTCTTGTCGGAGATCAGATCCGCGTCCAGGTCTCCGCGTTGCTCAGGGCGAACGGAGTCAACTTTGG  
TAGCTGCCTTCCCAAAAAGGGCGCGTGCCAGGCTTTGAGTTGCACTCGCACCGTAGTGGCATCAAAAGG  
TGACCGTGCCTCGGTCTGGGCGTTAGGATACAGCGCCTGCATAAAAGCCTTGATCTGCTTAAAGCCACCT  
GAGCCTTTGCGCCTTCAGAGAAGAACATGCCGCAAGACTTGGCCGAAAAGTGAATGGCCCGACCGCCG  
GTCGTGCACGCAGCACCTTGCGTCCGTGTTGGAGATCTGCACCACATTTCCGCCCCACCGGTTCTTCACG  
ATCTTGGCCTTGCTAGACTGCTCCTTCAGCGCGCGTGCCCGTTTTCGCTCGTCAATCCATTTCATCA  
CGTGCTCCTTATTTATCATAATGCTTCCGTGTAGACACTTAAGCTCGCCTTCGATCTCAGCGCAGCGGTG  
CAGCCACAACGCGCAGCCCGTGGGCTCGTGATGCTTGTAGGTACCTCTGCAAACGACTGCAGGTACGCC  
TGCAGGAATCGCCCCATCATCGTCACAAAGGTCTTGTTGCTGGTGAAGGTGAGCTGCAACCCGCGGTGCT  
CCTCGTTTCAGCCAGGTCTTGATACGCGCCGCGAGGCTTCCACTTGGTTCAGGCAGTAGTTTGAAGTTTCGC  
CTTTAGATCGTTATCCACGTGGTACTTGTCCATCAGCGCGCGCAGCCTCCATGCCCTTCTCCCACGCA  
GACAGTACGGCAGCACTCAGCGGGTTCATACCCGTAATTTCACTTTCCGCTTCGCTGGGCTCTTCTCTT  
CCTCTTGCGTCCGCACTACCAACGCGCACTGGGTCGTCTTCACTTACAGCCGCGCACTGTGCGCTTACCTCC  
TTTGCCATGCTTGATTAGCACCGGTGGGTTGCTGAAACCCACCATTGTAGCGCCACATCTTCTCTTTCT  
TCCTCGCTGTCCACGATTACCTCTGGTGATGGCGGGCGCTCGGGCTTGGGAGAAGGGCGCTTCTTTTCT  
TCTTGGGCGCAATGGCCAAATCCGCCCGGAGGTGATGGCCGCGGGCTGGGTGTGCGCGGCACAGCGC  
GTCTTGTGATGAGTCTTCTCGTCCGCTCGACTCGATACGCCGCTCATCCGCTTTTTTGGGGGCGCCCGG  
GGAGGCGGCGCGACGGGGACGGGGACGACACGTCCTCCATGGTTGGGGGACGTCGCGCCGACCGCGTC  
CGCGCTCGGGGTGGTTTTCGCGCTGCTCCTCTTCCGACTGGCCATTTCTTCTCTATAGGCAGAAAAA  
GATCATGGAGTCAGTCGAGAAGAAGGACAGCCTAACCGCCCCCTTGAGTTCGCCACCACCGCCTCCACC  
GATGCCGCAACGCGCTACCACTTCCCCGTCGAGGCACCCCCGCTTGAGGAGGAGGAAGTGATTATCG  
AGCAGGACCCAGGTTTTGTAAAGCGAAGACGACGAGGACCGCTCAGTACCAACAGAGGATAAAAAAGCAAGA  
CCAGGACAACGCAGAGGCAAACGAGGAACAAGTCGGGCGGGGGGACGAAAGGCATGGCGACTACCTAGAT  
GTGGGAGACGACGTGCTGTTGAAGCATCTGCAGCGCCAGTGCGCCATTATCTGCGACGCGTTGCAAGAGC  
GCAGCGATGTGCCCCCTCGCCATAGCGGATGTCAGCCTTGCTTACGAACGCCACCTATTCTACCGCGCGT  
ACCCCCCAAACGCCAAGAAAACGGCACATGCGAGCCCAACCCGCGCCTCAACTTCTACCCCGTATTTGCC  
GTGCCAGAGGTGCTTGCCACCTATCACATCTTTTCCAAAACCTGCAAGATACCCCTATCCTGCCGTGCCA  
ACCGCAGCCGAGCGGACAAGCAGCTGGCCTTGCGGCAGGGCGCTGTACATACCTGATATCGCCTCGCTCAA  
CGAAGTGCCAAAAATCTTTGAGGGTCTTGACGCGACGAGAAGCGCGCGGCAAACGCTCTGCAACAGGAA  
AACAGCGAAAAATGAAAGTCACTCTGGAGTGTGGTGGAACTCGAGGGTGACAACGCGCGCTAGCCGTAC  
TAAACGCGAGCATCGAGGTCAACCACTTGGCTTACCGGCACTTAACCTACCCCCAAGGTCATGAGCAC  
AGTCATGAGTGAGCTGATCGTGCGCCGTGCGCAGCCCCCTGGAGAGGGATGCAAATTTGCAAGAACAACA



Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

GAGGAGGGCCTACCCGAGTTGGCGACGAGCAGCTAGCGCGCTGGCTTCAAACGCGCGAGCCTGCCGACT  
TGGAGGAGCGACGCAAATAATGATGGCCGAGTGCTCGTTACCGTGGAGCTTGAGTGCATGCAGCGGTT  
CTTTGCTGACCCGGAGATGCAGCGCAAGCTAGAGGAAACATTGCACTACACCTTTCGACAGGGCTACGTA  
CGCCAGGCCTGCAAGATCTCCAACGTGGAGCTCTGCAACCTGGTCTCCTACCTTGAATTTTGCACGAAA  
ACCGCCTTGGGCAAACGTGCTTCATTCACGCTCAAGGGCGAGGCGCGCCGCGACTACGTCCGCGACTG  
CGTTTACTTATTTCTATGCTACACCTGGCAGACGGCCATGGGCGTTTGGCAGCAGTGCTTGGAGGAGTGC  
AACCTCAAGGAGCTGCAGAACTGCTAAAGCAAACCTGAAGGACCTATGGACGGCCTTCAACGAGCGCT  
CCGTGGCCGCGCACCTGGCGGACATCATTTTCCCCGAACGCTGCTTAAACCTTGAACAGGGTCTGCT  
AGACTTCACCAGTCAAAGCATGTTGCAGAACCTTAGGAACCTTATCCTAGAGCGCTCAGGAATCTTGCCC  
GCCACCTGCTGTGCACTTCTAGCGACTTTGTGCCATTAAAGTACCGCAATGCCCTCCGCGCTTTGGG  
GCCACTGCTACCTTCTGCAGCTAGCCAACTACCTTGCTTACCCTCTGACATAATGGAAGACGTGAGCGG  
TGACGGTCTACTGGAGTGTCACTGTGCTGCAACCTATGCACCCCGCACCGCTCCCTGGTTTGCAATTCTG  
CAGCTGCTTAACGAAAGTCAAATTATCGGTACCTTTGAGCTGCAGGGTCCCTCGCCTGACGAAAAGTCCG  
CGGCTCCGGGGTTGAAACTCACTCCGGGGCTGTGGACGTGCGCTTACCTTCGCAAATTTGTACCTGAGGA  
CTACCACGCCCACGAGATTAGGTTCTACGAAGACCAATCCCGCCCGCCAAATGCGGAGCTTACCGCCTGC  
GTCATTACCCAGGGCCACATTCTTGGCCAATTGCAAGCCATCAACAAAGCCCGCAAGAGTTTCTGCTAC  
GAAAGGGACGGGGGTTTACTTGGACCCCACTCCGGCGAGGAGCTCAACCCAATCCCCCGCCGCGCGCA  
GCCCTATCAGCAGCAGCCGCGGGCCCTTGCTTCCAGGATGGCACCCAAAAAGAAGCTGCAGCTGCCGCC  
GCCACCCACGACGAGGAGGAATACTGGGACAGTCAGGCAGAGGAGGTTTTGGACGAGGAGGAGGAGGAC  
ATGATGGAAGACTGGGAGAGCCTAGACGAGGAAGCTTCCGAGGTGCAAGAGGTGTGACGAAACACCGT  
CACCTCGGTGCTATTCCTCGCCGCGCCCCAGAAATCGGCAACCGGTTCCAGCATGGCTACAACCTC  
CGCTCCTCAGGCGCCGCGGCACTGCCCCGTTCCGCCACCCAACCGTAGATGGGACACCACTGGAACCAGG  
GCCGGTAAGTCCAAGCAGCCGCGCCGCTTAGCCCAAGAGCAACAACAGCGCCAAGGCTACCGCTCATGGC  
GCGGGCACAAGAAGCCATAGTTGCTTGCTTGCAAGACTGTGGGGGCAACATCTCCTTCGCCCCGCGCTT  
TCTTCTCTACCATCAGGCGTGCCCTTCCCCGTAACATCTGCACTTACTACCGTCATCTCTACAGCCCA  
TACTGCACCGCGCGCAGCGGACGCGCAGCAACAGCAGCGGCCACACAGAAGCAAAGCGACCGGATAGC  
AAGACTCTGACAAAGCCCCAAGAAATCCACAGCGCGGACAGCAGCAGGAGGAGGAGCGCTGCGTCTGGCGC  
CCAACGAACCCGTATCGACCCGCGAGCTTAGAAACAGGATTTTTCCCACTCTGTATGCTATATTTCAACA  
GAGCAGGGGCCAAGAACAAGAGCTGAAAATAAAAAACAGGTCTCTGCGATCCCTCACCCGAGCTGCCTG  
TATCAGAAAAGCGAAGATCAGCTTCGGCGCACGCTGGAAGACGCGGAGGCTCTCTTCAGTAAATACTGCG  
CGCTGACTCTTAAGGACTAGTTTCGCGCCCTTTCTCAAATTTAAGCGCGAAAACCTACGTATCTCCAGCG  
GCCACACCCGCGCCAGCACCTGTGCTCAGCGCCATTATGAGCAAGGAAATTTCCACGCCCTACATGTGG  
AGTTACCAGCCACAAATGGGACTTGCGGCTGGAGCTGCCAAGACTACTCAACCCGAATAAACTACATGA  
GCGCGGACATCCCAATGATATCCCGGTTCAACGGAATCCGCGCCACCGAAACCGAATTCTCTTGGAACA  
GGCGGCTATTACACCACTCGTAATAACCTTAATCCCCGTAGTTGGCCGCTGCCCCGCTGCTGTACCA  
GAAAGTCCCGCTCCCACTGTGCTTCCAGAGACGCCAGGCCGAAGTTTCAATGACTACTCAG  
GGGCGCAGCTTGCGGGCGCTTTCGTCACAGGTTGCGGTCGCCCGGCGAGGTTAATACTCACCTGACAAT  
CAGAGGGCGAGGTATTGAGCTCAACGACGAGTGGTGAGCTCCTCGCTTGGTCTCCGTCCGGACGGGACA  
TTTCAGATCGGCGCGCCGCGCTCCTTCATTACGCCTCGTCAGGCAATCCTAACTCTGCAGACCTCGT  
CCTCTGAGCCGCGCTCTGGAGGCATTGGAACCTTGCAATTTATTGAGGAGTTTGTGCCATCGGTCTACTT  
TAACCCCTTCTCGGGACCTCCCGGCCACTATCCGGATCAATTTATTCCTAACTTTGACGCGGTAAAGGAC  
TCGGCGGACGGCTACGACTGAATGTTAAGTGGAGAGGACAGCAACTGCGCCTGAAACACCTGGTCCACT  
GTCGCGGCCACAAGTGCTTTGCCCGGCACTCCGGTGAGTTTGTACTTTGAATTGCCCCGAGGATCATAT  
CGAGGGCCCGCGCACGGCGTCCGGCTTACCGCCAGGAGAGCTTGCCCGTAGCCTGATTCCGGGAGTTT  
ACCCAGCGCCCCCTGCTAGTTGAGCGGGACAGGGGACCCTGTGTTCTCACTGTGATTTGCAACTGTCTTA  
ACCTTGATTACATCAAGATCTTTGTTGCCATCTCTGTGCTGAGTATAATAAATACAGAAATTAATAAT  
ACTGGGGCTCCTATCGCCATCTGTAAACGCCACCGTCTTACCCGCCCAAGCAAACCAAGGCGAACCTT  
ACCTGGTACTTTTAACATCTCTCCCTCTGTGATTTACAACAGTTTCAACCCAGACGGAGTGAGTCTACGA  
GAGAACCTCTCCGAGCTCAGCTACTCCATCAGAAAAACACCACCTCCTTACCTGCCGGGAACGTACGA  
GTGCGTCAACGGCCGCTGCACCAACACCTACCGCTGACCGTAAACCAGACTTTTTCCGGACAGACCTCAA  
TAACCTGTGTTTACCAGAACAGGAGGTGAGCTTAGAAAACCTTAGGGTATTAGGCCAAAGGCGCAGCTAC  
TGTGGGGTTTATGAACAATTCAAGCAACTCTACGGGCTATTCTAATTCAAGTTTCTCTAGAAATGGACGG  
AATTATTACAGACAGCGCCTGCTAGAAAAGACGAGGGGACGCGCCGAGCAACAGCGCATGAATCAAGAG  
CTCCAAGACATGGTTAACTTGCACCAGTGCAAAAGGGGTATCTTTTGTCTGGTAAAGCAGGCCAAAGTCA

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

CCTACGACAGTAATACCACCGGACACCGCCTTAGCTACAAGTTGCCAACCAAGCGTCAGAAAATTGGTGGT  
CATGGTGGGAGAAAAGCCATTACCATAACTCAGCACTCGGTAGAAACCGAAGGCTGCATTCACTCACCT  
TGTCAAGGACCTGAGGATCTCTGCACCCCTTATTAAGACCCTGTGCGGTCTCAAAGATCTTATTCCTTTA  
ACTAATAAAAAAAAAATAATAAGCATCACTTACTTAAATCAGTTAGCAAATTTCTGTCCAGTTTATTCA  
GCAGCACCTCCTTGCCCTCCTCCCAGCTCTGGTATTGCAGCTTCCTCCTGGCTGCAAACTTTCTCCACAA  
TCTAAATGGAATGTCAGTTTCTCCTGTTCCTGTCCATCCGCACCCACTATCTTCATGTTGTTGCAGATG  
AAGCGCGCAAGACCGTCTGAAGATACCTTCAACCCCGTGTATCCATATGACACGGAACCGGTCTCCAA  
CTGTGCCTTTTCTTACTCCTCCCTTTGTATCCCCCAATGGGTTTCAAGAGAGTCCCCCTGGGGTACTCTC  
TTTGGCCTATCCGAACCTCTAGTTACCTCCAATGGCATGCTTGGCTCAAATGGGCAACGGCCTCTCT  
CTGGACGAGGCCGGCAACCTTACCTCCCAAAATGTAACCACTGTGAGCCACCTCTCAAAAAAACCAAGT  
CAAACATAAACCTGGAATATCTGCACCCCTCACAGTTACCTCAGAAGCCCTAACTGTGGCTGCCGCCGC  
ACCTCTAATGGTTCGCGGGCAACACACTCACCATGCAATCACAGGCCCGCTAACCGTGCACGACTCCAAA  
CTTAGCATTGCCACCCAAGGACCCCTCACAGTGTGAGAAGGAAAGCTAGCCCTGCAAACATCAGGCCCCC  
TCACCACCACCGATAGCAGTACCCCTTACTATCACTGCCTCACCCCTCTAACTACTGCCACTGGTAGCTT  
GGGCATTGACTTGAAAGAGCCCATTTATACACAAAATGGAAAAGTAGGACTAAAGTACGGGGCTCCTTTG  
CATGTAACAGACGACCTAAACACTTTGACCGTAGCAACTGGTCCAGGTGTGACTATTAATAATACTTCCT  
TGCAAACTAAAGTTACTGGAGCCTTGGGTTTTGATTACACAAGGCAATATGCAACTTAATGTAGCAGGAG  
ACTAAGGATTGATTCTCAAAACAGACGCCCTTATACTTGATGTTAGTTATCCGTTTGATGCTCAAAACCAA  
CTAAATCTAAGACTAGGACAGGGCCCTCTTTTTATAAACTCAGCCACAACCTGGATATTAACACAACA  
AAGGCCTTTACTTGTTTACAGCTTCAAACAATTCAAAAAGCTTGAGGTTAACCTAAGCACTGCCAAGGG  
GTTGATGTTTTGACGCTACAGCCATAGCCATTAATGCAGGAGATGGGCTTGAATTTGGTTCACCTAATGCA  
CCAAACACAAATCCCCCTCAAAACAAAAATTGGCCATGGCCTAGAATTTGATTCAAACAAGGCTATGGTTC  
CTAAACTAGGAAGTGGCCTTAGTTTGGACAGCACAGGTGCCATTACAGTAGGAAAACAAAAATAATGATAA  
GCTAACTTTGTGGACCACACCAGCTCCATCTCCTAACTGTAGACTAAATGCAGAGAAAGATGCTAAACTC  
ACTTTGGTCTTAAACAAAATGTGGCAGTCAAATACTTGCTACAGTTTCAGTTTGGCTGTTAAAGGCAGTT  
TGGCTCCAATATCTGGAACAGTTCAAAGTGCTCATCTTATTATAAGATTGACGAAAATGGAGTGCTACT  
AAACAATTCCTTCTTGACCCAGAATATTGGAACCTTAGAAATGGAGATCTTACTGAAGGAGAGCTTAT  
ACAAACGCTGTTGGATTTATGCCTAACCTATCAGCTTATCCAAAATCTCACGGTAAAAGTGCCAAAAGTA  
ACATTGTCAAGTTTACTTAAACGGAGACAAAACCTGTAACACTAACCTTACACTAAACGG  
TACACAGGAAACAGGAGACACAACCTCAAGTGCATACTCTATGTCATTTTCATGGGACTGGTCTGGCCAC  
AACTACATTAATGAAATATTTGCCACATCCTCTTACACTTTTTTCATACATTGCCCAAGAATAAAGATCG  
TTTGTGTTATGTTTCAACGTGTTTATTTTCAATTCAGAAAATTTTGAATCATTTTTTCATTACAGTAGTA  
TAGCCCCACCACCATAGCTTATACAGATCACCGTACCTTAATCAAACCTCACAGAACCCTAGTATTCAA  
CCTGCCACCTCCCTCCCAACACACAGAGTACACAGTCTTTCTCCCGGCTGGCCTTAAAAAGCATCATA  
TCATGGGTAACAGACATATTCTTAGGTGTTATATATTCCACAGGTTTTCTGTGCGAGCCAAAGCTCATCAG  
TGATATTAATAAACTCCCCGGGCAGCTCACTTAAAGTTCATGTGCTGTCCAGCTGCTGAGCCACAGCGCTG  
CTGTCCAACCTTGCGGTTGCTTAAACGGGCGGCGAAGGAGAAGTCCACGCCTACATGGGGGTAGAGTCATAA  
TCGTGCATCAGGATAGGGCGGTGGTGTGCTGCAGCAGCGCGGAATAAACTGCTGCCGCCGCCCTCCGTCC  
TGCAGGAATACAACATGGCAGTGGTCTCCTCAGCGATGATTGCGACCGCCCGCAGCATAAGGCGCCTTGT  
CCTCCGGGCACAGCAGCGCACCCCTGATCTCACTTAAATCAGCACAGTAAGTGCAGCACAGCACCACAATA  
TTGTTCAAATCCCACAGTGCAAGGCGCTGTATCCAAAGCTCATGGCGGGGACCACAGAACCACCGTGGC  
CATCATACCACAAGCGCAGGTAGATTAAGTGGCGACCCCTCATAAACACGCTGGACATAAACATTACCTC  
TTTTGGCATGTTGTAATTCACCACCTCCCGGTACCATATAAACCTCTGATTAAACATGGCGCCATCCACC  
ACCATCCTAAACAGCTGGCCAAAACCTGCCCGCCGGCTATACACTGCAGGGAACCGGGACTGGAACAAT  
GACAGTGGAGAGCCAGGACTCGTAACCATGGATCATCATGCTCGTCATGATATCAATGTTGGCACAACA  
CAGGCACACGTGCATACACTTCCTCAGGATTACAAGCTCCTCCCGGCTTAGAACCATATCCAGGGAACA  
ACCCATTCTGAATCAGCGTAAATCCCACACTGCAGGGAAGACCTCGCACGTAAGTACAGTTGTGCATTG  
TCAAAGTGTTACATTGGGGCAGCAGCGGATGATCCTCCAGTATGGTAGCGCGGGTTTCTGTCTCAAAGG  
AGGTAGACGATCCCTACTGTACGGAGTGCGCCGAGACAACCGAGATCGTGTTGGTTCGTAGTGTATGCCA  
AATGGAACGCCGGACGTAGTCATATTTCTGAAGCAAAACAGGTGCGGGCGTGACAAAACAGATCTGCGT  
CTCCGGTCTCGCCGCTTAGATCGCTCTGTGTAGTAGTTGTAGTATATCCACTCTCTCAAAGCATCCAGGC  
GCCCTGGCTCTCGGGTCTATGTAACTCCTTCATGCGCGCTGCCCTGATAACATCCACCACCGCAGA  
ATAAGCCACACCCAGCCAACCTACACATTCGTTCTGCGAGTCACACACGGGAGGAGCGGGAAGAGCTGGA  
AGAACCATGTTTTTTTTTTTATTCCAAAAGATTATCCAAAACCTCAAATGAAGATCTATTAAGTGAACG

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™  
(SEQ ID NO: 88).

CGCTCCCTCCGGTGGCGTGGTCAAACCTCTACAGCCAAAGAACAGATAATGGCATTGTGTAAGATGTTGCA  
CAATGGCTTCCAAAAGGCAAACGGCCCTCACGTCCAAGTGGACGTAAAGGCTAAACCCTTCAGGGTGAAT  
CTCCTCTATAAACATTCAGCACCTTCAACCATGCCCAAATAATTCTCATCTCGCCACCTTCTCAATATA  
TCTCTAAGCAAATCCCGAATATTAAGTCCGGCCATTGTAAAAATCTGCTCCAGAGCGCCCTCCACCTTCA  
GCCTCAAGCAGCGAATCATGATTGCAAAAATTCAAGTTCTCTACAGACCTGTATAAGATTCAAAAGCGGA  
ACATTAACAAAAATACCGCGATCCCGTAGGTCCCTTCGCAGGGCCAGCTGAACATAATCGTGCAGGTCTG  
CACGGACCAGCGCGGCCACTTCCCCGCCAGGAACCTTGACAAAAGAACCACACTGATTATGACACGCAT  
ACTCGGAGCTATGCTAACCAGCGTAGCCCCGATGTAAGCTTTGTTGCATGGGCGGCGATATAAAATGCAA  
GGTGCTGCTCAAAAATCAGGCAAAGCCTCGCGCAAAAAGAAAGCACATCGTAGTCATGCTCATGCGAGA  
TAAAGGCAGGTAAGCTCCCGAACCACCACAGAAAAAGACACCATTTTTCTCTCAAACATGTCTGCGGGTT  
TCTGCATAAACACAAAATAAAAATAACAAAAAACATTTAAACATTAGAAGCCTGTCTTACAACAGGAAAA  
ACAACCCTTATAAGCATAAGACGGACTACGGCCATGCCGGCGTGACCGTAAAAAACTGGTCACCGTGAT  
TAAAAAGCACCACCGACAGCTCCTCGGTTCATGTCCGGAGTCATAATGTAAGACTCGGTAAACACATCAGG  
TTGATTACATCGGTCACTGCTAAAAAGCGACCGAAATAGCCCCGGGGGAATACATACCCGCGAGGCGTAGA  
GACAACATTACAGCCCCCATAGGAGGTATAACAAAATTAATAGGAGAGAAAAACACATAAACACCTGAAA  
AACCTCCTGCCTAGGCAAAATAGCACCTTCCCGCTCCAGAACACATACAGCGCTTCCACAGCGGCAGC  
CATAACAGTCAGCCTTACCAGTAAAAAAGAAAACCTATTAAAAAAACACCACTCGACACGGCACCAGCTC  
AATCAGTCACAGTGTAAAAAAGGGCCAAGTGCAGAGCGAGTATATATAGGACTAAAAAATGACGTAACGG  
TTAAAGTCCACAAAAAACACCCAGAAAACCGCACGCGAACCTACGCCAGAAAACGAAAAGCCAAAAAACCC  
ACAACCTTCTCAAATCGTCACTTCCGTTTTCCACGTTACGTCACTTCCCATTTTAAGAAAACCTACAATT  
CCCAACACATACAAGTTACTCCGCCCTAAAACCTACGTACCCCGCCCCGTTCCACGCCCCGCGCCACGT  
CACAACTCCACCCCCCTATTATCATATTGGCTTCAATCCAAAATAAGGTATATTATTGATGATGTTAAT  
TAATTTAAATCCGCATGCGATATCGAGCTCTCCCGGAATTCGGATCTGCGACGCGAGGCTGGATGGCCT  
TCCCCATTATGATTCTTCTCGCTTCCGGCGGCATCGGGATGCCCGCGTTGCAGGCCATGCTGTCCAGGCA  
GGTAGATGACGACCATCAGGGACAGCTTCACGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTG  
CTGGCGTTTTTCCATAGGCTCCGCCCCCTCAGCAGCATCACAAAAATCGACGCTCAAGTCAGAGTGGC  
GAAACCCGACAGGACTATAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCTCTGTTCC  
GACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCAATGCTCA  
CGCTGTAGGTATCTCAGTTCCGGTGTAGGTCTGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTC  
AGCCCGACCGCTGCGCCTTATCCGGTAACATATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCC  
ACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAG  
TGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCT  
TCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTG  
CAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGAC  
GCTCAGTGGAACGAAACTCAGTTAAGGGATTTTGGTTCATGAGATTATCAAAAAGGATCTTCACCTAGA  
TCCTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAG  
GCACCTATCTCAGCGATCTGTCTATTTCTGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTA  
CGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCAGGCTCC  
AGATTTATCAGCAATAAACAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCCTGCAACTTTATCCGCC  
TCCATCCAGTCTATTAAATTGTTGCCGGAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAGTTTGCGCAACG  
TTGTTGCCATTGNTGCAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTTCATTCAGCTCCGGTTC  
CCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCCCTCCG  
ATCGTTGTCAGAAGTAAGTTGGCCGAGTGTATCACTCATGTTATGGCAGCACTGCATAATCTCTTA  
CTGTCTATGCCATCCGTAAGATGCTTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTG  
TATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAACACGGGATAATACCGCGCCACATAGCAGAACTTTA  
AAAGTGCTCATCATTTGAAAACGTTCTTCGGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTGAGATCCA  
GTTTCATGTAAACCACTCGTGCACCCAACCTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTG  
AGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGGAATAAGGGCGACACGGAAATGTTGAATACTCATA  
CTCTTCTTTTTTCAATATTAATTGAAGCATTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAAT  
GTATTTAGAAAAATAAACAAATAGGGGTTCGCGGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGA  
AACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTCGTCTTCAAGGATCC  
GAATTCCCCGGGAGAGCTCGATATCGCATGCGGATTTAAATTAATTAA

Please amend Table 12 on pages 395-403 as follows:

Table 12: Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

                                OpIE-2 pr
~~~~~
1  CATGATGATA AACAAATGTAT GGTGCTAATG TTGCTTCAAC AACAAATTCTG
   GTACTACTAT TTGTTACATA CCACGATTAC AACGAAGTTG TTGTTAAGAC
                                OpIE-2 pr
~~~~~
51  TTGAACTGTG TTTTCATGTT TGCCAACAAG CACCTTTATA CTCGGTGGCC
   AACTTGACAC AAAAGTACAA ACGGTTGTTT GTGGAAATAT GAGCCACCGG
                                OpIE-2 pr
~~~~~
101 TCCCCACCAC CAACTTTTTT GCACTGCAAA AAAACACGCT TTTGCACGCG
   AGGGGTGGTG GTTGAAAAAA CGTGACGTTT TTTTGTGCGA AAACGTGCGC
                                OpIE-2 pr
~~~~~
151 GGCCCATACA TAGTACAAAC TCTACGTTTC GTAGACTATT TTACATAAAT
   CCGGGTATGT ATCATGTTTG AGATGCAAAG CATCTGATAA AATGTATTTA
                                OpIE-2 pr
~~~~~
201 AGTCTACACC GTTGTATACG CTCCAAATAC ACTACCACAC ATTGAACCTT
   TCAGATGTGG CAACATATGC GAGGTTTATG TGATGGTGTG TAACTTGGAA
                                OpIE-2 pr
~~~~~
251 TTTGCAGTGC AAAAAAGTAC GTGTCGGCAG TCACGTAGGC CGGCCTTATC
   AAACGTCACG TTTTTCATG CACAGCCGTC AGTGCATCCG GCCGGAATAG
                                OpIE-2 pr
~~~~~
301 GGGTCGCGTC CTGTCACGTA CGAATCACAT TATCGGACCG GACGAGTGTT
   CCCAGCGCAG GACAGTGCAT GCTTAGTGTA ATAGCCTGGC CTGCTCACAA
                                OpIE-2 pr
~~~~~
351 GTCTTATCGT GACAGGACGC CAGCTTCCTG TGTGCTAAC CGCAGCCGGA
   CAGAATAGCA CTGTCCTGCG GTCGAAGGAC ACAACGATTG GCGTCGGCCT
                                OpIE-2 pr
~~~~~
401 CGCAACTCCT TATCGGAACA GGACGCGCCT CCATATCAGC CGCGCGTTAT
   GCGTTGAGGA ATAGCCTTGT CCTGCGCGGA GGTATAGTCG GCGCGCAATA
                                OpIE-2 pr
~~~~~
451 CTCATGCACG TGACCGGACA CGAGGCGCCC GTCCCGCTTA TCGCGCCTAT
   GAGTACGTGC ACTGGCCTGT GCTCCGCGGG CAGGGCGAAT AGCGCGGATA
                                OpIE2FOR
~~~~~
                                OpIE-2 pr
~~~~~

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Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

501  AAATACAGCC CGCAACGATC TGGTAAACAC AGTTGAACAG CATCTGTTTCG
    TTTATGTCGG GCGTTGCTAG ACCATTTGTG TCAACTTGTC GTAGACAAGC
551  AATTTAAAGC TTGATATCGA ATTCCTGCAG CCCAGCGCTG GATCCTCGAT
    TTAAATTTTCG AACTATAGCT TAAGGACGTC GGGTCGCGAC CTAGGAGCTA
        attR1
    ~~~~~
601  CACAAGTTTG TACAAAAAAG CTGAACGAGA AACGTAAAAT GATATAAATA
    GTGTTCAAAC ATGTTTTTTC GACTTGCTCT TTGCATTTTA CTATATTTAT
        attR1
    ~~~~~
651  TCAATATATT AAATTAGATT TTGCATAAAA AACAGACTAC ATAATACTGT
    AGTTATATAA TTTAATCTAA AACGTATTTT TTGTCTGATG TATTATGACA
        attR1
    ~~~~~
701  AAAACACAAC ATATCCAGTC ACTATGGCGG CCGCATTAGG CACCCCAGGC
    TTTTGTGTTG TATAGGTCAG TGATACCGCC GCGGTAATCC GTGGGGTCCG
751  TTTACACTTT ATGCTTCCGG CTCGTATAAT GTGTGGATTG TGAGTTAGGA
    AAATGTGAAA TACGAAGGCC GAGCATATTA CACACCTAAA ACTCAATCCT
        Cmr
    ~~~~~
801  TCCGTCGAGA TTTTCAGGAG CTAAGGAAGC TAAAATGGAG AAAAAAATCA
    AGGCAGCTCT AAAAGTCCTC GATTCCTTCG ATTTTACCTC TTTTTTTAGT
        Cmr
    ~~~~~
851  CTGGATATAC CACCGTTGAT ATATCCCAAT GGCATCGTAA AGAACATTTT
    GACCTATATG GTGGCAACTA TATAGGGTTA CCGTAGCATT TCTTGTAATA
        Cmr
    ~~~~~
901  GAGGCATTTT AGTCAGTTGC TCAATGTACC TATAACCAGA CCGTTCAGCT
    CTCCGTAAAG TCAGTCAACG AGTTACATGG ATATTGGTCT GGCAAGTCGA
        Cmr
    ~~~~~
951  GGATATTACG GCCTTTTTTA AGACCGTAAA GAAAAATAAG CACAAGTTTT
    CCTATAATGC CGGAAAAATT TCTGGCATTT CTTTTTATTC GTGTTCAAAA
        Cmr
    ~~~~~
1001 ATCCGGCCTT TATTCACATT CTTGCCCGCC TGATGAATGC TCATCCGGAA
    TAGGCCGGAA ATAAGTGTA GAACGGGCGG ACTACTTACG AGTAGGCCTT
        Cmr
    ~~~~~
1051 TTCCGTATGG CAATGAAAGA CGGTGAGCTG GTGATATGGG ATAGTGTTC
    AAGGCATACC GTTACTTTCT GCCACTCGAC CACTATACCC TATCACAAGT
        Cmr
    ~~~~~

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Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

1101  CCCTTGTTAC ACCGTTTTTC ATGAGCAAAC TGAAACGTTT TCATCGCTCT
      GGAACAATG TGGCAAAAGG TACTCGTTTG ACTTTGCAAA AGTAGCGAGA
      Cmr
      ~~~~~
1151  GGAGTGAATA CCACGACGAT TTCCGGCAGT TTCTACACAT ATATTCGCAA
      CCTCACTTAT GGTGCTGCTA AAGGCCGTCA AAGATGTGTA TATAAGCGTT
      Cmr
      ~~~~~
1201  GATGTGGCGT GTTACGGTGA AAACCTGGCC TATTTCCCTA AAGGGTTTAT
      CTACACCGCA CAATGCCACT TTTGGACCGG ATAAAGGGAT TTCCCAAATA
      Cmr
      ~~~~~
1251  TGAGAATATG TTTTTCGTCT CAGCCAATCC CTGGGTGAGT TTCACCAGTT
      ACTCTTATAC AAAAAGCAGA GTCGGTTAGG GACCCACTCA AAGTGGTCAA
      Cmr
      ~~~~~
1301  TTGATTTAAA CGTGGCCAAT ATGGACAAC TCTTCGCCCC CGTTTTTACC
      AACTAAATTT GCACCGGTGA TACCTGTTGA AGAAGCGGGG GCAAAAGTGG
      Cmr
      ~~~~~
1351  ATGGGCAAAT ATTATACGCA AGGCGACAAG GTGCTGATGC CGCTGGCGAT
      TACCCGTTTA TAATATGCGT TCCGCTGTTC CACGACTACG GCGACCGCTA
      Cmr
      ~~~~~
1401  TCAGGTTTCAT CATGCCGTTT GTGATGGCTT CCATGTCGGC AGAATGCTTA
      AGTCCAAGTA GTACGGCAAA CACTACCGAA GGTACAGCCG TCTTACGAAT
      Cmr
      ~~~~~
1451  ATGAATTACA ACAGTACTGC GATGAGTGGC AGGGCGGGGC GTAAACGCGT
      TACTTAATGT TGTCATGACG CTAATCACC GATTCGCGCA
1501  GGATCCGGCT TACTAAAAGC CAGATAACAG TATGCGTATT TCGCGCTGA
      CCTAGGCCGA ATGATTTTCG GTCTATTGTC ATACGCATAA ACGCGCGACT
1551  TTTTTCGCGT ATAAGAATAT ATACTGATAT GTATACCCGA AGTATGTCAA
      AAAAACGCCA TATTCTTATA TATGACTATA CATATGGGCT TCATACAGTT
1601  AAAGAGGTAT GCTATGAAGC AGCGTATTAC AGTGACAGTT GACAGCGACA
      TTTCTCCATA CGATACTTCG TCGCATAATG TCACTGTCAA CTGTGCTGT
1651  GCTATCAGTT GCTCAAGGCA TATATGATGT CAATATCTCC GGTCTGGTAA
      CGATAGTCAA CGAGTTCCGT ATATACTACA GTTATAGAGG CCAGACCATT
1701  GCACAACCAT GCAGAATGAA GCCCGTCGTC TGCGTGCCGA ACGCTGGAAA
      CGTGTGGTGA CGTCTTACTT CGGGCAGCAG ACGCACGGCT TGCGACCTTT
1751  GCGGAAAATC AGGAAGGGAT GGCTGAGGTC GCCCGGTTTA TTGAAATGAA
      CGCCTTTTAG TCCTTCCCTA CCGACTCCAG CGGGCCAAAT AACTTTACTT
      ccdB
      ~~~~~

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Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

1801  CGGCTCTTTT GCTGACGAGA ACAGGGGCTG GTGAAATGCA GTTTAAGGTT
      GCCGAGAAAA CGACTGCTCT TGTCCCCGAC CACTTTACGT CAAATTCCAA
      ccdB
      ~~~~~
1851  TACACCTATA AAAGAGAGAG CCGTTATCGT CTGTTTGTGG ATGTACAGAG
      ATGTGGATAT TTTCTCTCTC GGCAATAGCA GACAAACACC TACATGTCTC
      ccdB
      ~~~~~
1901  TGATATTATT GACACGCCCC GCGACGGAT GGTGATCCCC CTGGCCAGTG
      ACTATAATAA CTGTGCGGGC CCGCTGCCTA CCACTAGGGG GACCGGTCAC
      ccdB
      ~~~~~
1951  CACGTCTGCT GTCAGATAAA GTCTCCCGTG AACTTTACCC GGTGGTGCAT
      GTGCAGACGA CAGTCTATTT CAGAGGGCAC TTGAAATGGG CCACCACGTA
      ccdB
      ~~~~~
2001  ATCGGGGATG AAAGCTGGCG CATGATGACC ACCGATATGG CCAGTGTGCC
      TAGCCCCTAC TTTCGACCGC GTACTACTGG TGGCTATACC GGTCACACGG
      ccdB
      ~~~~~
2051  GGTCTCCGTT ATCGGGGAAG AAGTGGCTGA TCTCAGCCAC CGCGAAAATG
      CCAGAGGCAA TAGCCCCTTC TTCACCGACT AGAGTCGGTG GCGCTTTTAC
      ccdB
      ~~~~~
2101  ACATCAAAAA CGCCATTAAC CTGATGTTCT GGGGAATATA AATGTCAGGC
      TGTAGTTTTT GCGGTAATTG GACTACAAGA CCCCTTATAT TTACAGTCCG
      attr2
      ~~~~~
2151  TCCCTTATAC ACAGCCAGTC TGCAGGTCGA CCATAGTGAC TGGATATGTT
      AGGGAATATG TGTCGGTCAG ACGTCCAGCT GGTATCACTG ACCTATACAA
      attr2
      ~~~~~
2201  GTGTTTTACA GTATTATGTA GTCTGTTTTT TATGCAAAAT CTAATTTAAT
      CACAAAATGT CATAATACAT CAGACAAAAA ATACGTTTTA GATTAAATTA
      attr2
      ~~~~~
2251  ATATTGATAT TTATATCATT TTACGTTTCT CGTTCAGCTT TCTTGTACAA
      TATAACTATA AATATAGTAA AATGCAAAGA GCAAGTCGAA AGAACATGTT
      attr2 V5 tag
      ~~~~~
2301  AGTGGTGATC GACCCGGGTC TAGAGGGCCC GCGGTTTCGAA GGTAAGCCTA
      TCACCACTAG CTGGGCCCAG ATCTCCCGGG CGCCAAGCTT CCATTCGGAT
      V5 tag
      ~~~~~

```

Poly His 6  
tag

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

2351  TCCCTAACCC TCTCCTCGGT CTCGATTCTA CGCGTACCGG TCATCATCAC
      AGGGATTGGG AGAGGAGCCA GAGCTAAGAT GCGCATGGCC AGTAGTAGTG
      Poly His 6 tag                               OpIE-2 PolyA
      ~~~~~~
2401  CATCACCATT GAGTTTATCT GACTAAATCT TAGTTTGTAT TGTCATGTTT
      GTAGTGGTAA CTCAAATAGA CTGATTTAGA ATCAAACATA ACAGTACAAA
      OpIE-2 PolyA
      ~~~~~~
2451  TAATACAATA TGTATGTTT AAATATGTTT TTAATAAATT TTATAAAATA
      ATTATGTTAT ACAATACAAA TTTATACAAA AATTATTTAA AATATTTTAT
      OpIE-2 PolyA
      ~~~~~~
2501  ATTTCAACTT TTATTGTAAC AACATTGTCC ATTTACACAC TCCTTTCAAG
      TAAAGTTGAA AATAACATTG TTGTAACAGG TAAATGTGTG AGGAAAGTTC
2551  CGCGTGGGAT CGATGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA
      GCGCACCCCTA GCTACGAGTG AGTTTCCGCC ATTATGCCAA TAGGTGTCTT
      pMB1 ori
      ~~~~~~
2601  TCAGGGGATA ACGCAGGAAA GAACATGTGA GCAAAAGGCC AGCAAAAGGC
      AGTCCCCTAT TGCGTCCTTT CTTGTACACT CGTTTTCCGG TCGTTTTCCG
      pMB1 ori
      ~~~~~~
2651  CAGGAACCGT AAAAAGGCCG CGTTGCTGGC GTTTTTCCAT AGGCTCCGCC
      GTCCTTGGCA TTTTCCGGC GCAACGACCG CAAAAGGTA TCCGAGGCGG
      pMB1 ori
      ~~~~~~
2701  CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG GTGGCGAAAC
      GGGGACTGCT CGTAGTGTTT TTAGCTGCGA GTTCAGTCTC CACCGCTTTG
      pMB1 ori
      ~~~~~~
2751  CCGACAGGAC TATAAAGATA CCAGGCGTTT CCCCTGGAA GCTCCCTCGT
      GGCTGTCCTG ATATTTCTAT GGTCCGCAAA GGGGACCTT CGAGGGAGCA
      pMB1 ori
      ~~~~~~
2801  GCGCTCTCCT GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCGCCTTTC
      CGCGAGAGGA CAAGGCTGGG ACGGCGAATG GCCTATGGAC AGGCGGAAAG
      pMB1 ori
      ~~~~~~
2851  TCCCTTCGGG AAGCGTGGCG CTTTCTCATA GCTCACGCTG TAGGTATCTC
      AGGGAAGCCC TTCGCACCGC GAAAGAGTAT CGAGTGCGAC ATCCATAGAG
      pMB1 ori
      ~~~~~~

```



Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

2901  AGTTCGGTGT AGGTCGTTCG CTCCAAGCTG GGCTGTGTGC ACGAACCCCC
      TCAAGCCACA TCCAGCAAGC GAGGTTTCGAC CCGACACACG TGCTTGGGGG
                pMB1 ori
      ~~~~~
2951  CGTTCAGCCC GACCGCTGCG CCTTATCCGG TAACTATCGT CTTGAGTCCA
      GCAAGTCGGG CTGGCGACGC GGAATAGGCC ATTGATAGCA GAACTCAGGT
                pMB1 ori
      ~~~~~
3001  ACCCGGTAAG ACACGACTTA TCGCCACTGG CAGCAGCCAC TGGTAACAGG
      TGGGCCATTC TGTGCTGAAT AGCGGTGACC GTCGTCGGTG ACCATTGTCC
                pMB1 ori
      ~~~~~
3051  ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
      TAATCGTCTC GCTCCATACA TCCGCCACGA TGTCTCAAGA ACTTCACCAC
                pMB1 ori
      ~~~~~
3101  GCCTAACTAC GGCTACACTA GAAGAACAGT ATTTGGTATC TGCCTCTGTC
      CGGATTGATG CCGATGTGAT CTTCTTGTC AATACCATAG ACGCGAGACG
                pMB1 ori
      ~~~~~
3151  TGAAGCCAGT TACCTTCGGA AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA
      ACTTCGGTCA ATGGAAGCCT TTTTCTCAAC CATCGAGAAC TAGGCCGTTT
                pMB1 ori
      ~~~~~
3201  CAAACCACCG CTGGTAGCGG TGGTTTTTTT GTTTGCAAGC AGCAGATTAC
      GTTTGGTGGC GACCATCGCC ACCAAAAAAA CAAACGTTTC TCGTCTAATG
                pMB1 ori
      ~~~~~
3251  GCGCAGAAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT
      CGCGTCTTTT TTTCTAGAG TTCTTCTAGG AAAC TAGAAA AGATGCCCCA
3301  CTGACGCTCA GTGGAACGAA AACTCACGTT AAGGGATTTT GGTCATGCCC
      GACTGCGAGT CACCTTGCTT TTGAGTGCAA TTCCCTAAAA CCAGTACGGG
                GP64 promoter
      ~~~~~
3351  TTGTTCCGAA GGGTTGTGTC ACGTAGGCCA GATAACGGTC GGGTATATAA
      AACAAGGCTT CCAACACAG TGCATCCGGT CTATTGCCAG CCCATATATT
                GP64 promoter
      ~~~~~
3401  GATGCCTCAA TGCTACTAGT AAATCAGTCA CACCAAGGCT TCAATAAGGA
      CTACGGAGTT ACGATGATCA TTTAGTCAGT GTGGTTCCGA AGTTATTCCT
      GP64 promoter                                EM7
      ~~~~~
3451  ACACACAAGC AAGCCCTTTG AGTCAAGGGC TGCCGGGCTG CAGCACGTGT
      TGTGTGTTTC TTCGGGAAAC TCAGTTCCCG ACGGCCCGAC GTCGTGCACA
                EM7
      ~~~~~

```

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

3501  TGACAATTAA TCATCGGCAT AGTATATCGG CATAGTATAA TACGACAAGG
      ACTGTTAATT AGTAGCCGTA TCATATAGCC GTATCATATT ATGCTGTTCC
                        Blastacidin(r)
      ~~~~~
3551  TGAGGAACTA AACCATGGCC AAGCCTTTGT CTCAAGAAGA ATCCACCCTC
      ACTCCTTGAT TTGGTACCGG TTCGGAACA GAGTTCTTCT TAGGTGGGAG
                        Blastacidin(r)
      ~~~~~
3601  ATTGAAAGAG CAACGGCTAC AATCAACAGC ATCCCCATCT CTGAAGACTA
      TAACTTTCTC GTTGCCGATG TTAGTTGTCTG TAGGGGTAGA GACTTCTGAT
                        Blastacidin(r)
      ~~~~~
3651  CAGCGTCGCC GCGCAGCTC TCTCTAGCGA CGGCCGCATC TTCACTGGTG
      GTCGCAGCGG CCGCGTCGAG AGAGATCGCT GCCGGCGTAG AAGTGACCAC
                        Blastacidin(r)
      ~~~~~
3701  TCAATGTATA TCATTTTACT GGGGGACCTT GCGCAGAACT CGTGGTGCTG
      AGTTACATAT AGTAAAATGA CCCCTGGAA CGCGTCTTGA GCACCACGAC
                        Blastacidin(r)
      ~~~~~
3751  GGCCTGCTG CTGCTGCGGC AGCTGGCAAC CTGACTTGTA TCGTCGCGAT
      CCGTGACGAC GACGACGCCG TCGACCGTTG GACTGAACAT AGCAGCGCTA
                        Blastacidin(r)
      ~~~~~
3801  CGGAAATGAG AACAGGGGCA TCTTGAGCCC CTGCGGACGG TGCCGACAGG
      GCCTTTACTC TTGTCCCCGT AGAACTCGGG GACGCCTGCC ACGGCTGTCC
                        Blastacidin(r)
      ~~~~~
3851  TTCTTCTCGA TCTGCATCCT GGGATCAAAG CCATAGTGAA GGACAGTGAT
      AAGAAGAGCT AGACGTAGGA CCCTAGTTTC GGTATCACTT CCTGTCACTA
                        Blastacidin(r)
      ~~~~~
3901  GGACAGCCGA CGGCAGTTGG GATTCGTGAA TTGCTGCCCT CTGGTTATGT
      CCTGTCGGCT GCCGTCAACC CTAAGCACTT AACGACGGGA GACCAATACA
      Blastacidin(r)
      ~~~~~
3951  GTGGGAGGGC TAAGCACTTC GTGGCCGAGG AGCAGGACTG ACACGTCCCG
      CACCCTCCCG ATTCGTGAAG CACCGGCTCC TCGTCCTGAC TGTGCAGGGC
4001  GGAGATCTGC ATGTCTACTA AACTCACAAA TTAGAGCTTC AATTTAATTA
      CCTCTAGACG TACAGATGAT TTGAGTGTTT AATCTCGAAG TTAAATTAAT
                        Amp (r)
      ~~~~~
4051  TATCAGTTAT TACCCATTGA AAAAGGAAGA GTATGAGTAT TCAACATTTT
      ATAGTCAATA ATGGGTAAC TTTTCCTTCT CATACTCATA AGTTGTAAAG
                        Amp (r)
      ~~~~~

```

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```

4101  CGTGTGCGCC TTATTCCCTT TTTTGC GGCA TTTTGCCTTC CTGTTTTTGC
      GCACAGCGGG AATAAGGGAA AAAACGCCGT AAAACGGAAG GACAAAAACG
      Amp (r)
      ~~~~~
4151  TCACCCAGAA ACGCTGGTGA AAGTAAAAGA TGCTGAAGAT CAGTTGGGTG
      AGTGGGTCTT TGCGACCACT TTCATTTTCT ACGACTTCTA GTCAACCCAC
      Amp (r)
      ~~~~~
4201  CACGAGTGGG TTACATCGAA CTGGATCTCA ACAGCGGTAA GATCCTTGAG
      GTGCTCACCC AATGTAGCTT GACCTAGAGT TGTCGCCATT CTAGGAACTC
      Amp (r)
      ~~~~~
4251  AGTTTTTCGCC CCGAAGAACG TTTTCCAATG ATGAGCACTT TTAAAGTTCT
      TCAAAAGCGG GGCTTCTTGC AAAAGGTTAC TACTCGTGAA AATTTCAAGA
      Amp (r)
      ~~~~~
4301  GCTATGTGGC GCGGTATTAT CCCGTATTGA CGCCGGGCAA GAGCAACTCG
      CGATACACCG CGCCATAATA GGGCATAACT GCGGCCCCGT CTCGTTGAGC
      Amp (r)
      ~~~~~
4351  GTCGCCGCAT AACTATTCT CAGAATGACT TGGTTGAGTA CTCACCACTC
      CAGCGGCGTA TGTGATAAGA GTCTTACTGA ACCAACTCAT GAGTGGTCAG
      Amp (r)
      ~~~~~
4401  ACAGAAAAGC ATCTTACGGA TGGCATGACA GTAAGAGAAT TATGCAGTGC
      TGTCTTTTCG TAGAATGCCT ACCGTACTGT CATTCTCTTA ATACGTCACG
      Amp (r)
      ~~~~~
4451  TGCCATAACC ATGAGTGATA AACTGCGGC CAACTTACTT CTGACAACGA
      ACGGTATTGG TACTCACTAT TGTGACGCCG GTTGAATGAA GACTGTTGCT
      Amp (r)
      ~~~~~
4501  TCGGAGGACC GAAGGAGCTA ACCGCTTTTT TGCACAACAT GGGGGATCAT
      AGCCTCCTGG CTTCTCGAT TGGCGAAAAA ACGTGTTGTA CCCCCTAGTA
      Amp (r)
      ~~~~~
4551  GTAACTCGCC TTGATCGTTG GGAACCGGAG CTGAATGAAG CCATACCAAA
      CATTGAGCGG AACTAGCAAC CCTTGGCCTC GACTTACTTC GGTATGGTTT
      Amp (r)
      ~~~~~
4601  CGACGAGCGT GACACCACGA TGCCTGTAGC AATGGCAACA ACGTTGCGCA
      GCTGCTCGCA CTGTGGTGCT ACGGACATCG TTACCGTTGT TGCAACGCGT
      Amp (r)
      ~~~~~

```

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

```
4651  AACTATTAAC TGGCGAACTA CTTACTCTAG CTTCCCGGCA ACAATTAATA
      TTGATAATTG ACCGCTTGAT GAATGAGATC GAAGGGCCGT TGTTAATTAT
      Amp (r)
      ~~~~~
4701  GACTGGATGG AGGCGGATAA AGTTGCAGGA CCACTTCTGC GCTCGGCCCT
      CTGACCTACC TCCGCCTATT TCAACGTCCT GGTGAAGACG CGAGCCGGGA
      Amp (r)
      ~~~~~
4751  TCCGGCTGGC TGGTTTATTG CTGATAAATC TGGAGCCGGT GAGCGTGGGT
      AGGCCGACCG ACCAAATAAC GACTATTTAG ACCTCGGCCA CTCGCACCCA
      Amp (r)
      ~~~~~
4801  CTCGCGGTAT CATTGCAGCA CTGGGGCCAG ATGGTAAGCC CTCCCGTATC
      GAGCGCCATA GTAACGTCGT GACCCCGGTC TACCATTTCG GAGGGCATAG
      Amp (r)
      ~~~~~
4851  GTAGTTATCT ACACGACGGG GAGTCAGGCA ACTATGGATG AACGAAATAG
      CATCAATAGA TGTGCTGCCC CTCAGTCCGT TGATACCTAC TTGCTTTATC
      Amp (r)
      ~~~~~
4901  ACAGATCGCT GAGATAGGTG CCTCACTGAT TAAGCATTGG TAACTGTCAG
      TGTCTAGCGA CTCTATCCAC GGAGTGACTA ATTCGTAACC ATTGACAGTC
4951  ACCAAGTTTA CTCATATATA CTTTAGATTG ATTTAAAACT TCATTTTTAA
      TGGTTCAAAT GAGTATATAT GAAATCTAAC TAAATTTTGA AGTAAAAATT
5001  TTTAAAAGGA TCTAGGTGAA GATCCTTTTT GATAATCT
      AAATTTTCCT AGATCCACTT CTAGGAAAAA CTATTAGA
```

Please amend Table 13 on pages 404-415 as follows:

Table 13: Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

	ph promoter				
	~~~~~				
1	ATAAGTATTT	TACTGTTTTC	GTAACAGTTT	TGTAATAAAA	AAACCTATAA
	TATTCATAAA	ATGACAAAAG	CATTGTCAAA	ACATTATTTT	TTTGGATATT
51	ATATTCCGGA	TTATTCATAC	CGTCCCACCA	TCGGGCGCGG	ATCCCCGGGT
	TATAAGGCCT	AATAAGTATG	GCAGGGTGGT	AGCCCGCGCC	TAGGGGCCCA
	att R1				
	~~~~~				
101	ACCGATATCA	CAAGTTTGTG	CAAAAAAGCT	GAACGAGAAA	CGTAAAATGA
	TGGCTATAGT	GTTCAAACAT	GTTTTTTCGA	CTTGCTCTTT	GCATTTTACT
	att R1				
	~~~~~				
151	TATAAATATC	AATATATTAA	ATTAGATTTT	GCATAAAAAA	CAGACTACAT
	ATATTTATAG	TTATATAATT	TAATCTAAAA	CGTATTTTTT	GTCTGATGTA
	att R1				
	~~~~~				
201	AATACTGTAA	AACACAACAT	ATCCAGTCAC	TATGGCGGCC	GCTCCCTAAC
	TTATGACATT	TTGTGTTGTA	TAGGTCAGTG	ATACCGCCGG	CGAGGGATTG
251	CCACGGGGCC	CGTGGCTATG	GCAGGGCTTG	CCGCCCCGAC	GTTGGCTGCG
	GGTGCCCCGG	GCACCGATAC	CGTCCCGAAC	GGCGGGGCTG	CAACCGACGC
301	AGCCCTGGGC	CTTCACCCGA	ACTTGGGGGT	TGGGGTGGGG	AAAAGGAAGA
	TCGGGACCCG	GAAGTGGGCT	TGAACCCCCA	ACCCACCCCC	TTTTCCTTCT
351	AACGCGGGCG	TATTGGTCCC	AATGGGGTCT	CGGTGGGGTA	TCGACAGAGT
	TTGCGCCCGC	ATAACCAGGG	TTACCCCAAG	GCCACCCCAT	AGCTGTCTCA
401	GCCAGCCCTG	GGACCGAACC	CCGCGTTTAT	GAACAAACGA	CCCAACACCC
	CGGTCGGGAC	CCTGGCTTGG	GGCGCAAATA	CTTGTTTGCT	GGGTTGTGGG
451	GTGCGTTTTA	TTCTGTCTTT	TTATTGCCGT	CATAGCGCGG	GTTCTTCCG
	CACGCAAAAT	AAGACAGAAA	AATAACGGCA	GTATCGCGCC	CAAGGAAGGC
501	GTATTGTCTC	CTTCCGTGTT	TCAGTTAGCC	TCCCCCATCT	CCCGGGCAAA
	CATAACAGAG	GAAGGCACAA	AGTCAATCGG	AGGGGGTAGA	GGGCCCGTTT
	~~~~~				
	tk gene				
	N A E G M E R A F				
551	CGTGCGCGCC	AGGTCGCAGA	TCGTCCGTAT	GGAGCCTGGG	GTGGTGACGT
	GCACGCGCGG	TCCAGCGTCT	AGCAGCCATA	CCTCGGACCC	CACCACTGCA
	~~~~~				
	tk gene				
	T R A L D C I T P I S G P T T V H				
601	GGGTCTGGAC	CATCCCGGAG	GTAAGTTGCA	GCAGGGCGTC	CCGGCAGCCG
	CCCAGACCTG	GTAGGGCCTC	CATTCAACGT	CGTCCCGCAG	GGCCGTCGGC
	~~~~~				
	tk gene				
	. T Q V M G S T L Q L L A D R C G A .				

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

651  GCGGGCGATT GGTCGTAATC CAGGATAAAG ACATGCATGG GACGGAGGCG
    CGCCCCGCTAA CCAGCATTAG GTCCTATTTC TGTACGTACC CTGCCTCCGC
    ~~~~~
                                tk gene
    .. P S Q   D Y D   L I F V   H M P   R L R
701  TTTGGCCAAG ACGTCCAAAG CCCAGGCAAA CACGTTATAC AGGTGCGCGT
    AAACCGGTTC TGCAGGTTTC GGGTCCGTTT GTGCAATATG TCCAGCGGCA
    ~~~~~
                                tk gene
    K A L V   D L A   W A F   V N Y L   D G N .
751  TGGGGGCCAG CAACTCGGGG GCCCGAAACA GGTAAATAA CGTGTCCCCG
    ACCCCCGGTC GTTGAGCCCC CGGGCTTTGT CCCATTTATT GCACAGGGGC
    ~~~~~
                                tk gene
    . P A L   L E P A   R F L   T F L   T D G I .
801  ATATGGGGTC GTGGGCCCCG GTTGCTCTGG GGCTCGGCAC CCTGGGGCGG
    TATACCCAG CACCCGGGCG CAACGAGACC CCGAGCCGTG GGACCCCGCC
    ~~~~~
                                tk gene
    .. H P R   P G A   N S Q P   E A G   Q P P
851  CACGGCCGCC CCCGAAAGCT GTCCCCAATC CTCCCGCCAC GACCCGCCGC
    GTGCCGGCGG GGGCTTTTCG CAGGGGTTAG GAGGGCGGTG CTGGGCGGCG
    ~~~~~
                                tk gene
    V A A G   S L Q   G W D   E R W S   G G G .
901  CCTGCAGATA CCGCACCGTA TTGGCAAGCA GCCCATAAAC GCGGCGAATC
    GGACGTCTAT GCGGTGGCAT AACCGTTCGT CGGGTATTTG CGCCGCTTAG
    ~~~~~
                                tk gene
    . Q L Y   R V T N   A L L   G Y V   R R I A .
951  GCGGCCAGCA TAGCCAGGTC AAGCCGCTCG CCGGGGCGCT GGCGTTTGGC
    CGCCGGTCGT ATCGGTCCAG TTCGGCGAGC GGCCCCGCGA CCGCAAACCG
    ~~~~~
                                tk gene
    .. A L M   A L D   L R E G   P R Q   R K A
1001 CAGGCGGTCTG ATGTGTCTGT CCTCCGGAAG GGCCCCAAC ACGATGTTTG
    GTCCGCCAGC TACACAGACA GGAGGCCTTC CCGGGGGTTG TGCTACAAAC
    ~~~~~
                                tk gene
    L R D I   H R D   E P L   A G L V   I N T .
1051 TGCCGGGCAA GGTCGGCGGG ATGAGGGCCA CGAACGCCAG CACGGCCTGG
    ACGGCCGTT CCAGCCGCC TACTCCCGGT GCTTGCGGTC GTGCCGGACC
    ~~~~~
                                tk gene
    . G P L   T P P I   L A V   F A L   V A Q P .

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

1101  GGGGTCATGC TGCCCATAAAG GTATCGCGCG GCCGGGTAGC ACAGGAGGGC
      CCCCAGTACG ACGGGTATTC CATAGCGCGC CGGCCCATCG TGTCTCTCCG
      ~~~~~
                        tk gene
      .. T M S   G M L   Y R A A   P Y C   L L A
1151  GGCGATGGGA TGGCGGTCGA AGATGAGGGT GAGGGCCGGG GGCGGGGGCAT
      CCGCTACCCT ACCGCCAGCT TCTACTCCCA CTCCCGGCC CCGCCCCGTA
      ~~~~~
                        tk gene
      A I P H   R D F   I L T   L A P P   P A H .
1201  GTGAGCTCCC AGCCTCCCCC CCGATATGAG GAGCCAGAAC GGCGTCGGTC
      CACTCGAGGG TCGGAGGGGG GGCTATACTC CTCGGTCTTG CCGCAGCCAG
      ~~~~~
                        tk gene
      . S S G   A E G G   I H P   A L V   A D T V .
1251  ACGGCATAAG GCATGCCCAT TGTTATCTGG GCGCTTGTC TTACCACCGC
      TGCCGTATTC CGTACGGGTA ACAATAGACC CGCGAACAGT AATGGTGGCG
      ~~~~~
                        tk gene
      .. A Y P   M G M   T I Q A   S T M   V V A
1301  CGCGTCCCCG GCCGATATCT CACCCTGGTC GAGGCGGTGT TGTGTGGTGT
      GCGCAGGGGC CGGCTATAGA GTGGGACCAG CTCCGCCACA ACACACCACA
      ~~~~~
                        tk gene
      A D G A   S I E   G Q D   L R H Q   T T Y .
1351  AGATGTTCGC GATTGTCTCG GAAGCCCCCA ACACCCGCCA GTAAGTCATC
      TCTACAAGCG CTAACAGAGC CTTCGGGGGT TGTGGGCGGT CATTAGTAG
      ~~~~~
                        tk gene
      . I N A   I T E S   A G L   V R W   Y T M P .
1401  GGCTCGGGTA CGTAGACGAT ATCGTCGCGC GAACCCAGGG CCACCAGCAG
      CCGAGCCCAT GCATCTGCTA TAGCAGCGCG CTTGGGTCCC GGTGGTCGTC
      ~~~~~
                        tk gene
      .. E P V   Y V I   D D R S   G L A   V L L
1451  TTGCGTGGTG GTGGTTTTCC CCATCCCGTG GGGACCGTCT ATATAAACCC
      AACGCACCAC CACCAAAAGG GGTAGGGCAC CCCTGGCAGA TATATTGTTGG
      ~~~~~
                        tk gene
      Q T T T   T K G   M G H   P G D I   Y V R .
1501  GCAGTAGCGT GGGCATTTTC TGCTCCAGGC GGACTTCCGT GGCTTTTTGT
      CGTCATCGCA CCCGTAAAAG ACGAGGTCCG CCTGAAGGCA CCGAAAAACA
      ~~~~~
                        tk gene
      . L L T   P M K Q   E L R   V E T   A K Q Q .

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

1551  TGCCGGCGAG GGC GCAACGC CGTACGTCGG TTGTTATGGC CGCGAGAACG
      ACGGCCGCTC CCGCGTTGCG GCATGCAGCC AACAAATACCG GCGCTCTTGC
      ~~~~~
                        tk gene
      .. R R P R L A T R R N N H G R S R
1601  CGCAGCCTGG TCGAACGCAG ACGCGTGTTG ATGGCAGGGG TACGAAGCCA
      GCGTCGGACC AGCTTGCGTC TGCGCACAAC TACCGTCCCC ATGCTTCGGT
      ~~~~~
                        tk gene
      A A Q D F A S A H Q H C P Y S A M
1651  TAGATCCCGT TATCAATTAC TTATACTATC CGGCGCGCAA GCGAGCGTGT
      ATCTAGGGCA ATAGTTAATG AATATGATAG GCCGCGCGTT CGCTCGCACA
      ~~~~~
                        ie-0 promoter
1701  GCGCCGGAGC ACAATTGATA CTGATTTACG AGTTGGGCAA ACGGGCTTTA
      CGCGGCCTCG TGTTAACTAT GACTAAATGC TCAACCCGTT TGCCCCGAAAT
      ~~~~~
                        ie-0 promoter
1751  TATAGCCTGT CCCCTCCACA GCCCTAGTGC CGTGCGCAAA GTGCCTACGT
      ATATCGGACA GGGGAGGTGT CGGGATCACG GCACGCGTTT CACGGATGCA
      ~~~~~
                        ie-0 promoter
1801  GACCAGGCTC TCCTACGCAT ATACAATCTT ATCTCTATAG ATAAGGTTTC
      CTGGTCCGAG AGGATGCGTA TATGTTAGAA TAGAGATATC TATTCCAAAG
      ~~~~~
                        ie-0 promoter
1851  CATATATAAA GCCTCTCGAT GGCTGAACGT GCACAGTATC GTGTTGATTT
      GTATATATTT CGGAGAGCTA CCGACTTGCA CGTGTCATAG CACAATAAA
      ~~~~~
                        ie-0 promoter
1901  CTGAGTGCTA ACTAACAGTT ACAATGAACC GTTTTTTTTCG AGAGAATAAC
      GACTCACGAT TGATTGTCAA TGTTACTTGG CAAAAAAGC TCTCTTATTG
      ~~~~~
                        ie-0 promoter
1951  ATTTTGTGACG CGCCAAGGAC CGGGGGCAAG GGTCGTGCCA AATCTTTGCC
      TAAAAACTGC GCGGTTCTTG GCCCCCGTTC CCAGCACGGT TTAGAAACGG
      ~~~~~
                        ie-0 promoter
2001  AGCGCCTGCC GCCAACTCGC CGCCGTCGCC TGTTGTCGTCG CCGCCAAAAT
      TCGCGGACGG CGGTTGAGCG GCGGCAGCGG ACAAGCAGGC GGCGGTTTTA
      ~~~~~
                        ie-0 promoter
2051  CTAACATCAA ACCACCTACG CGCATCTCTC CGCCTAAACA GCCTATGTGC
      GATTGTAGTT TGGTGGATGC GCGTAGAGAG GCGGATTTGT CGGATACACG
      ~~~~~
                        ie-0 promoter

```



Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

2101  ACCTCTCCGG CCAAGCCGTT GGAGCACAGC AGCATTGTAA GTAAAAAACC
      TGGAGAGGCC GGTTCGGCAA CCTCGTGTCT TCGTAACATT CATTTTTTGG
      ~~~~~~
                ie-0 promoter
2151  AGTCGTCAAC AGAAAAGATG GATATTTTGT GCCGCCCGAG TTTGGGAACA
      TCAGCAGTTG TCTTTTCTAC CTATAAAACA CGGCGGGCTC AAACCCTTGT
      ~~~~~~
                ie-0 promoter
2201  AGTTTGAAGG TTTGCCCGCG TACAGCGACA AACTGGATTT CAAACAAGAG
      TCAAACTTCC AAACGGGCGC ATGTCGCTGT TTGACCTAAA GTTTGTTCTC
      ~~~~~~
                ie-0 promoter
                                p10 promoter
2251  CGCGATCTAC GTACCTGCAG GCCCGGGCTC AACCCAACAC AATATATTAT
      GCGCTAGATG CATGGACGTC CGGGCCCGAG TTGGGTTGTG TTATATAATA
      ~~~~~~
                p10 promoter
2301  AGTTAAATAA GAATTATTAT CAAATCATTT GTATATTAAT TAAAATACTA
      TCAATTTATT CTTAATAATA GTTAGTAAA CATATAATTA ATTTTATGAT
      ~~~~~~
                p10 promoter                                lacZ
                                M   T   M   I   T   .
2351  TACTGTAAAT TACATTTTAT TTACAATTCA CTCTAGAATG ACCATGATTA
      ATGACATTTA ATGTAAAATA AATGTTAAGT GAGATCTTAC TGGTACTAAT
      ~~~~~~
                lacZ
      .   D   S   L   A   V   V   L   Q   R   R   D   W   E   N   P   G
2401  CGGATTCACT GGCCGTCGTT TTACAACGTC GTGACTGGGA AAACCCTGGC
      GCCTAAGTGA CCGGCAGCAA AATGTTGCAG CACTGACCCT TTTGGGACCG
      ~~~~~~
                lacZ
      V   T   Q   L   N   R   L   A   A   H   P   P   F   A   S   W   R   .
2451  GTTACCCAAC TTAATCGCCT TGCAGCACAT CCCCCTTTTCG CCAGCTGGCG
      CAATGGGTTG AATTAGCGGA ACGTCGTGTA GGGGGAAGC GGTGACCGC
      ~~~~~~
                lacZ
      .   N   S   E   E   A   R   T   D   R   P   S   Q   Q   L   R   S   L   .
2501  TAATAGCGAA GAGGCCCGCA CCGATCGCCC TTCCCAACAG TTGCGCAGCC
      ATTATCGCTT CTCCGGGCGT GGCTAGCGGG AAGGGTTGTC AACGCGTCGG
      ~~~~~~
                lacZ
      .   N   G   E   W   R   F   A   W   F   P   A   P   E   A   V   P

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

2551   TGAATGGCGA ATGGCGCTTT GCCTGGTTTC CGGCACCAGA AGCGGTGCCG
      ACTTACCGCT TACCGCGAAA CGGACCAAAG GCCGTGGTCT TCGCCACGGC
                lacZ
      ~~~~~
                Bsu36I
                ~~~~~
      E  S  W  L  E  C  D  L  P  E  A  D  T  V  V  V  P  .
2601   GAAAGCTGGC TGGAGTGCGA TCTTCCTGAG GCCGATACTG TCGTCGTCCC
      CTTTCGACCG ACCTCACGCT AGAAGGACTC CGGCTATGAC AGCAGCAGGG
                lacZ
      ~~~~~
      .  S  N  W  Q  M  H  G  Y  D  A  P  I  Y  T  N  V  T  .
2651   CTCAAAGTGG CAGATGCACG GTTACGATGC GCCCATCTAC ACCAACGTAA
      GAGTTTGACC GTCTACGTGC CAATGCTACG CGGGTAGATG TGGTTGCATT
                lacZ
      ~~~~~
      .  Y  P  I  T  V  N  P  P  F  V  P  T  E  N  P  T
2701   CCTATCCCAT TACGGTCAAT CCGCCGTTTG TTCCACGGA GAATCCGACG
      GGATAGGGTA ATGCCAGTTA GCGGCAAAC AAGGGTGCCT CTTAGGCTGC
                lacZ
      ~~~~~
      G  C  Y  S  L  T  F  N  V  D  E  S  W  L  Q  E  G  .
2751   GGTTGTTACT CGCTCACATT TAATGTTGAT GAAAGCTGGC TACAGGAAGG
      CCAACAATGA GCGAGTGTA ATTACAATA CTTTCGACCG ATGTCCTTCC
                lacZ
      ~~~~~
      .  Q  T  R  I  I  F  D  G  V  N  S  A  F  H  L  W  C  .
2801   CCAGACGCGA ATTATTTTGG ATGGCGTTAA CTCGGCGTTT CATCTGTGGT
      GGTCTGCGCT TAATAAAAAC TACCGCAATT GAGCCGCAA GTAGACACCA
                lacZ
      ~~~~~
      .  N  G  R  W  V  G  Y  G  Q  D  S  R  L  P  S  E
2851   GCAACGGGCG CTGGGTCGGT TACGGCCAGG ACAGTCGTTT GCCGTCTGAA
      CGTTGCCCGC GACCCAGCCA ATGCCGGTCC TGTCAGCAA CGGCAGACTT
                lacZ
      ~~~~~
      F  D  L  S  A  F  L  R  A  G  E  N  R  L  A  V  M  .
2901   TTTGACCTGA GCGCATTTTT ACGCGCCGGA GAAAACCGCC TCGCGGTGAT
      AAAGTGGACT CGCGTAAAAA TGCGCGGCCT CTTTGGCGG AGCGCCACTA
                lacZ
      ~~~~~
      .  V  L  R  W  S  D  G  S  Y  L  E  D  Q  D  M  W  R  .

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

2951  GGTGCTGCGT TGGAGTGACG GCAGTTATCT GGAAGATCAG GATATGTGGC
      CCACGACGCA ACCTCACTGC CGTCAATAGA CCTTCTAGTC CTATACACCG
                lacZ
      ~~~~~
      · M S G I F R D V S L L H K P T T
3001  GGATGAGCGG CATTTTCCGT GACGTCTCGT TGCTGCATAA ACCGACTACA
      CCTACTCGCC GTAAAAGGCA CTGCAGAGCA ACGACGTATT TGGCTGATGT
                lacZ
      ~~~~~
      Q I S D F H V A T R F N D D F S R ·
3051  CAAATCAGCG ATTTCCATGT TGCCACTCGC TTTAATGATG ATTTTCAGCCG
      GTTTAGTCGC TAAAGGTACA ACGGTGAGCG AAATTACTAC TAAAGTCGGC
                lacZ
      ~~~~~
      · A V L E A E V Q M C G E L R D Y L ·
3101  CGCTGTACTG GAGGCTGAAG TTCAGATGTG CGGCGAGTTG CGTGACTACC
      GCGACATGAC CTCCGACTTC AAGTCTACAC GCCGCTCAAC GCACTGATGG
                lacZ
      ~~~~~
      · R V T V S L W Q G E T Q V A S G
3151  TACGGGTAAC AGTTTCTTTA TGGCAGGGTG AAACGCAGGT CGCCAGCGGC
      ATGCCCATTTG TCAAAGAAAT ACCGTCCAC TTTGCGTCCA GCGGTCGCCG
                lacZ
      ~~~~~
      T A P F G G E I I D E R G G Y A D ·
3201  ACCGCGCCTT TCGGCGGTGA AATTATCGAT GAGCGTG GTTATGCCGA
      TGGCGCGGAA AGCCGCCACT TTAATAGCTA CTCGCACCAC CAATACGGCT
                lacZ
      ~~~~~
      · R V T L R L N V E N P K L W S A E ·
3251  TCGCGTCACA CTACGTCTGA ACGTCGAAAA CCCGAAACTG TGGAGCGCCG
      AGCGCAGTGT GATGCAGACT TGCAGCTTTT GGGCTTTGAC ACCTCGCGGC
                lacZ
      ~~~~~
      · I P N L Y R A V V E L H T A D G
3301  AAATCCCGAA TCTCTATCGT GCGGTGGTTG AACTGCACAC CGCCGACGGC
      TTTAGGGCTT AGAGATAGCA CGCCACCAAC TTGACGTGTG GCGGCTGCCG
                lacZ
      ~~~~~
      T L I E A E A C D V G F R E V R I ·
3351  ACGCTGATTG AAGCAGAAGC CTGCGATGTC GGTTTCCGCG AGGTGCGGAT
      TGCGACTAAC TTCGTCTTCG GACGCTACAG CCAAAGGCGC TCCACGCCTA
                lacZ
      ~~~~~
      · E N G L L L L N G K P L L I R G V ·

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

3401  TGAAAATGGT CTGCTGCTGC TGAACGGCAA GCCGTTGCTG ATTCGAGGCG
      ACTTTTACCA GACGACGACG ACTTGCCGTT CGGCAACGAC TAAGCTCCGC
      lacZ
      ~~~~~
      ·  N  R  H    E  H  H    P  L  H  G    Q  V  M    D  E  Q
3451  TTAACCGTCA CGAGCATCAT CCTCTGCATG GTCAGGTCAT GGATGAGCAG
      AATTGGCAGT GCTCGTAGTA GGAGACGTAC CAGTCCAGTA CCTACTCGTC
      lacZ
      ~~~~~
      T  M  V  Q    D  I  L    L  M  K    Q  N  N  F    N  A  V  ·
3501  ACGATGGTGC AGGATATCCT GCTGATGAAG CAGAACAAC TTAACGCCGT
      TGCTACCACG TCCTATAGGA CGACTACTTC GTCTTGTTGA AATTGCGGCA
      lacZ
      ~~~~~
      ·  R  C  S    H  Y  P  N    H  P  L    W  Y  T    L  C  D  R  ·
3551  GCGCTGTTCG CATTATCCGA ACCATCCGCT GTGGTACACG CTGTGCGACC
      CGCGACAAGC GTAATAGGCT TGGTAGGCGA CACCATGTGC GACACGCTGG
      lacZ
      ~~~~~
      ·  Y  G  L    Y  V  V    D  E  A  N    I  E  T    H  G  M
3601  GCTACGGCCT GTATGTGGTG GATGAAGCCA ATATTGAAAC CCACGGCATG
      CGATGCCGGA CATAACCAC CTACTTCGGT TATAACTTTG GGTGCCGTAC
      lacZ
      ~~~~~
      V  P  M  N    R  L  T    D  D  P    R  W  L  P    A  M  S  ·
3651  GTGCCAATGA ATCGTCTGAC CGATGATCCG CGCTGGCTAC CGGCGATGAG
      CACGGTACT TAGCAGACTG GCTACTAGGC GCGACCGATG GCCGCTACTC
      lacZ
      ~~~~~
      ·  E  R  V    T  R  M  V    Q  R  D    R  N  H    P  S  V  I  ·
3701  CGAACGCGTA ACGCGAATGG TGCAGCGCGA TCGTAATCAC CCGAGTGTGA
      GCTTGCGCAT TGCGCTTACC ACGTCGCGCT AGCATTAGTG GGCTCACACT
      lacZ
      ~~~~~
      ·  I  W  S    L  G  N    E  S  G  H    G  A  N    H  D  A
3751  TCATCTGGTC GCTGGGGAAT GAATCAGGCC ACGGCGCTAA TCACGACGCG
      AGTAGACCAG CGACCCCTTA CTTAGTCCGG TGCCGCGATT AGTGCTGCGC
      lacZ
      ~~~~~
      L  Y  R  W    I  K  S    V  D  P    S  R  P  V    Q  Y  E  ·
3801  CTGTATCGCT GGATCAAATC TGTCGATCCT TCCCGCCCGG TGCAGTATGA
      GACATAGCGA CCTAGTTTAG ACAGCTAGGA AGGGCGGGCC ACGTCATACT
      lacZ
      ~~~~~
      ·  G  G  G    A  D  T  T    A  T  D    I  I  C    P  M  Y  A  ·

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

3851  AGGCGGCGGA  GCCGACACCA  CGGCCACCGA  TATTATTTGC  CCGATGTACG
      TCCGCCGCCT  CGGCTGTGGT  GCCGGTGGCT  ATAATAAACG  GGCTACATGC
                        lacZ
      ~~~~~
      ·  R  V  D    E  D  Q    P  F  P  A    V  P  K    W  S  I
3901  CGCGCGTGGA  TGAAGACCAG  CCCTTCCCGG  CTGTGCCGAA  ATGGTCCATC
      GCGCGCACCT  ACTTCTGGTC  GGAAGGGGCC  GACACGGCTT  TACCAGGTAG
                        lacZ
      ~~~~~
      K  K  W  L    S  L  P    G  E  T    R  P  L  I    L  C  E  ·
3951  AAAAAATGGC  TTTCGCTACC  TGGAGAGACG  CGCCCGCTGA  TCCTTTGCGA
      TTTTTTACCG  AAAGCGATGG  ACCTCTCTGC  GCGGGCGACT  AGGAAACGCT
                        lacZ
      ~~~~~
      ·  Y  A  H    A  M  G  N    S  L  G    G  F  A    K  Y  W  Q  ·
4001  ATACGCCCAC  GCGATGGGTA  ACAGTCTTGG  CGGTTTCGCT  AAATACTGGC
      TATGCGGGTG  CGCTACCCAT  TGTCAAGAAC  GCCAAAGCGA  TTTATGACCG
                        lacZ
      ~~~~~
      ·  A  F  R    Q  Y  P    R  L  Q  G    G  F  V    W  D  W
4051  AGGCGTTTCG  TCAGTATCCC  CGTTTACAGG  GCGGCTTCGT  CTGGGACTGG
      TCCGCAAAGC  AGTCATAGGG  GCAAATGTCC  CGCCGAAGCA  GACCCTGACC
                        lacZ
      ~~~~~
      V  D  Q  S    L  I  K    Y  D  E    N  G  N  P    W  S  A  ·
4101  GTGGATCAGT  CGCTGATTAA  ATATGATGAA  AACGGCAACC  CGTGGTCGGC
      CACCTAGTCA  GCGACTAATT  TATACTACTT  TTGCCGTTGG  GCACCAGCCG
                        lacZ
      ~~~~~
      ·  Y  G  G    D  F  G  D    T  P  N    D  R  Q    F  C  M  N  ·
4151  TTACGGCGGT  GATTTTGGCG  ATACGCCGAA  CGATCGCCAG  TTCTGTATGA
      AATGCCGCCA  CTAAAACCGC  TATGCGGCTT  GCTAGCGGTC  AAGACATACT
                        lacZ
      ~~~~~
      ·  G  L  V    F  A  D    R  T  P  H    P  A  L    T  E  A
4201  ACGGTCTGGT  CTTTGCCGAC  CGCACGCCGC  ATCCAGCGCT  GACGGAAGCA
      TGCCAGACCA  GAAACGGCTG  GCGTGCGGCG  TAGGTCGCGA  CTGCCTTCGT
                        lacZ
      ~~~~~
      K  H  Q  Q    Q  F  F    Q  F  R    L  S  G  Q    T  I  E  ·
4251  AAACACCAGC  AGCAGTTTTT  CCAGTTCCGT  TTATCCGGGC  AAACCATCGA
      TTTGTGGTCG  TCGTCAAAAA  GGTCAAGGCA  AATAGGCCCG  TTTGGTAGCT
                        lacZ
      ~~~~~
      ·  V  T  S    E  Y  L  F    R  H  S    D  N  E    L  L  H  W  ·

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

4301  AGTGACCAGC GAATACCTGT TCCGTCATAG CGATAACGAG CTCCTGCACT
      TCACTGGTCG CTTATGGACA AGGCAGTATC GCTATTGCTC GAGGACGTGA
              lacZ
      ~~~~~
      ·  M  V  A  L  D  G  K  P  L  A  S  G  E  V  P  L
4351  GGATGGTGGC GCTGGATGGT AAGCCGCTGG CAAGCGGTGA AGTGCCTCTG
      CCTACCACCG CGACCTACCA TTCGGCGACC GTTCGCCACT TCACGGAGAC
              lacZ
      ~~~~~
      D  V  A  P  Q  G  K  Q  L  I  E  L  P  E  L  P  Q
4401  GATGTCGCTC CACAAGGTAA ACAGTTGATT GAACTGCCTG AACTACCGCA
      CTACAGCGAG GTGTTCCATT TGTCAACTAA CTTGACGGAC TTGATGGCGT
              lacZ
      ~~~~~
      ·  P  E  S  A  G  Q  L  W  L  T  V  R  V  V  Q  P  N
4451  GCCGGAGAGC GCCGGGCAAC TCTGGCTCAC AGTACGCGTA GTGCAACCGA
      CGGCCTCTCG CGGCCCGTTG AGACCGAGTG TCATGCGCAT CACGTTGGCT
              lacZ
      ~~~~~
      ·  A  T  A  W  S  E  A  G  H  I  S  A  W  Q  Q  W
4501  ACGCGACCGC ATGGTCAGAA GCCGGGCACA TCAGCGCCTG GCAGCAGTGG
      TGCGCTGGCG TACCAGTCTT CGGCCCGTGT AGTCGCGGAC CGTCGTCACC
              lacZ
      ~~~~~
      R  L  A  E  N  L  S  V  T  L  P  A  A  S  H  A  I
4551  CGTCTGGCGG AAAACCTCAG TGTGACGCTC CCCGCCGCGT CCCACGCCAT
      GCAGACCGCC TTTTGGAGTC ACACTGCGAG GGGCGGCGCA GGGTGCGGTA
              lacZ
      ~~~~~
      ·  P  H  L  T  T  S  E  M  D  F  C  I  E  L  G  N  K
4601  CCCGCATCTG ACCACCAGCG AAATGGATT TTTGATCGAG CTGGGTAATA
      GGGCGTAGAC TGGTGGTCGC TTTACCTAAA AACGTAGCTC GACCCATTAT
              lacZ
      ~~~~~
      ·  R  W  Q  F  N  R  Q  S  G  F  L  S  Q  M  W  I
4651  AGCGTTGGCA ATTTAACCGC CAGTCAGGCT TTCTTTCACA GATGTGGATT
      TCGCAACCGT TAAATTGGCG GTCAGTCCGA AAGAAAGTGT CTACACCTAA
              lacZ
      ~~~~~
      G  D  K  K  Q  L  L  T  P  L  R  D  Q  F  T  R  A
4701  GGCGATAAAA AACCACTGCT GACGCCGCTG CGCGATCAGT TCACCCGTGC
      CCGCTATTTT TTGTTGACGA CTGCGGCGAC GCGCTAGTCA AGTGGGCACG
              lacZ
      ~~~~~
      ·  P  L  D  N  D  I  G  V  S  E  A  T  R  I  D  P  N

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

4751  ACCGCTGGAT AACGACATTG GCGTAAGTGA AGCGACCCGC ATTGACCCTA
      TGGCGACCTA TTGCTGTAAC CGCATTCACT TCGCTGGGCG TAACTGGGAT
              lacZ
      ~~~~~
      ·  A  W  V  E  R  W  K  A  A  G  H  Y  Q  A  E  A
4801  ACGCCTGGGT CGAACGCTGG AAGGCGGCGG GCCATTACCA GGCCGAAGCA
      TGCGGACCCA GCTTGCAGACC TTCCGCGGCC CGGTAATGGT CCGGCTTCGT
              lacZ
      ~~~~~
      A  L  L  Q  C  T  A  D  T  L  A  D  A  V  L  I  T
4851  GCGTTGTTGC AGTGCACGGC AGATACACTT GCTGATGCGG TGCTGATTAC
      CGCAACAACG TCACGTGCCG TCTATGTGAA CGACTACGCC ACGACTAATG
              lacZ
      ~~~~~
      ·  T  A  H  A  W  Q  H  Q  G  K  T  L  F  I  S  R  K
4901  GACCGCTCAC GCGTGGCAGC ATCAGGGGAA AACCTTATTT ATCAGCCGGA
      CTGGCGAGTG CGCACCGTCG TAGTCCCCTT TTGGAATAAA TAGTCGGCCT
              lacZ
      ~~~~~
      ·  T  Y  R  I  D  G  S  G  Q  M  A  I  T  V  D  V
4951  AAACCTACCG GATTGATGGT AGTGGTCAAA TGGCGATTAC CGTTGATGTT
      TTTGGATGGC CTAACCTACCA TCACCAGTTT ACCGCTAATG GCAACTACAA
              lacZ
      ~~~~~
      E  V  A  S  D  T  P  H  P  A  R  I  G  L  N  C  Q
5001  GAAGTGGCGA GCGATACACC GCATCCGGCG CGGATTGGCC TGAAGTGCCA
      CTTCACCGCT CGCTATGTGG CGTAGGCCGC GCCTAACCGG ACTTGACGGT
              lacZ
      ~~~~~
      ·  L  A  Q  V  A  E  R  V  N  W  L  G  L  G  P  Q  E
5051  GCTGGCGCAG GTAGCAGAGC GGGTAAACTG GCTCGGATTA GGGCCGCAAG
      CGACCGCGTC CATCGTCTCG CCCATTTGAC CGAGCCTAAT CCCGGCGTTC
              lacZ
      ~~~~~
      ·  N  Y  P  D  R  L  T  A  A  C  F  D  R  W  D  L
5101  AAAACTATCC CGACCGCCTT ACTGCCGCCT GTTTTGACCG CTGGGATCTG
      TTTTGATAGG GCTGGCGGAA TGACGGCGGA CAAACTGGC GACCCTAGAC
              lacZ
      ~~~~~
      P  L  S  D  M  Y  T  P  Y  V  F  P  S  E  N  G  L
5151  CCATTGTCAG ACATGTATAC CCCGTACGTC TTCCCGAGCG AAAACGGTCT
      GGTAACAGTC TGTACATATG GGGCATGCAG AAGGGCTCGC TTTTGCCAGA
              lacZ
      ~~~~~
      ·  R  C  G  T  R  E  L  N  Y  G  P  H  Q  W  R  G  D

```

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

```

5201  GCGCTGCGGG  ACGCGCGAAT  TGAATTATGG  CCCACACCAG  TGGCGCGGGC
      CGCGACGCCC  TGCGCGCTTA  ACTTAATACC  GGGTGTGGTC  ACCGCGCCGC
                        lacZ
      ~~~~~
      ·  F  Q  F    N  I  S    R  Y  S  Q    Q  Q  L    M  E  T
5251  ACTTCCAGTT  CAACATCAGC  CGCTACAGTC  AACAGCAACT  GATGGAAACC
      TGAAGGTCAA  GTTGTAGTCG  GCGATGTCAG  TTGTCGTTGA  CTACCTTTGG
                        lacZ
      ~~~~~
      S  H  R  H    L  L  H    A  E  E    G  T  W  L    N  I  D
5301  AGCCATCGCC  ATCTGCTGCA  CGCGGAAGAA  GGCACATGGC  TGAATATCGA
      TCGGTAGCGG  TAGACGACGT  GCGCCTTCTT  CCGTGTACCG  ACTTATAGCT
                        lacZ
      ~~~~~
      ·  G  F  H    M  G  I  G    G  D  D    S  W  S    P  S  V  S
5351  CGGTTTCCAT  ATGGGGATTG  GTGGCGACGA  CTCCTGGAGC  CCGTCAGTAT
      GCCAAAGGTA  TACCCCTAAC  CACCGCTGCT  GAGGACCTCG  GGCAGTCATA
                        lacZ
      ~~~~~
      ·  A  E  F    Q  L  S    A  G  R  Y    H  Y  Q    L  V  W
5401  CGGCGGAATT  CCAGCTGAGC  GCCGGTCGCT  ACCATTACCA  GTTGGTCTGG
      GCCGCCTTAA  GGTCGACTCG  CGGCCAGCGA  TGGTAATGGT  CAACCAGACC
      lacZ                               AttR2
      ~~~~~
      C  Q  K
5451  TGTCAAAAAT  AATGACTGCA  GGTGACCAT  AGTGAAGTGA  TATGTTGTGT
      ACAGTTTTTA  TTACTGACGT  CCAGCTGGTA  TCACTGACCT  ATACAACACA
                        AttR2
      ~~~~~
5501  TTTACAGTAT  TATGTAGTCT  GTTTTTTATG  CAAAATCTAA  TTTAATATAT
      AAATGTCATA  ATACATCAGA  CAAAAAATAC  GTTTTAGATT  AAATTATATA
                        AttR2
      ~~~~~
5551  TGATATTTAT  ATCATTTTAC  GTTCTCGTT  CAGCTTTCTT  GTACAAAGTG
      ACTATAAATA  TAGTAAAATG  CAAAGAGCAA  GTCGAAAGAA  CATGTTTCAC
      AttR2                               V5/His
      ~~~~~
                        G  K  P    I  P  N  P    L  L  G
5601  GTGAGAATGA  ATGAAGATCT  GGGGAAGCCT  ATCCCTAACC  CTCTCCTCGG
      CACTCTTACT  TACTTCTAGA  CCCCTTCGGA  TAGGGATTGG  GAGAGGAGCC
                        V5/His
      ~~~~~
      ·  L  D  S    T  R  T  G    H  H  H    H  H  H
5651  TCTCGATTCT  ACGCGTACCG  GTCATCATCA  CCATCACCAT  TGA
      AGAGCTAAGA  TGCGCATGGC  CAGTAGTAGT  GGTAGTGGTA  ACT

```



Please amend Table 14 on pages 416-428 as follows:

Table 14: Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

ph promoter
~~~~~
1  ATAAGTATTT TACTGTTTTC GTAACAGTTT TGTAATAAAA AAACCTATAA
   TATTCATAAA ATGACAAAAG CATTGTCAAA ACATTATTTT TTTGGATATT
51  ATATTCCGGA TTATTCATAC CGTCCCACCA TCGGGCGCGG ATCCTATAAA
   TATAAGGCCT AATAAGTATG GCAGGGTGGT AGCCCGCGCC TAGGATATTT
                                   Melittin signal
                                   ~~~~~
      M  K  F  L  V  N  V  A  L  V  F  M  V  V  Y  I  S  .
101  TATGAAATTC TTAGTCAACG TTGCCCTTGT TTTTATGGTC GTATACATTT
   ATACTTTAAG AATCAGTTGC AACGGGAACA AAAATACCAG CATATGTAAA
   Melittin signal                                     attR1
   ~~~~~
   .  Y  I  Y  A
151  CTTACATCTA TGCGGCATGG TCGAATCAAA CAAGTTTGTA CAAAAAAGCT
   GAATGTAGAT ACGCCGTACC AGCTTAGTTT GTTCAAACAT GTTTTTTCGA
                                   attR1
   ~~~~~
201  GAACGAGAAA CGTAAAATGA TATAAATATC AATATATTAA ATTAGATTTT
   CTTGCTCTTT GCATTTTACT ATATTTATAG TTATATAATT TAATCTAAAA
                                   attR1
   ~~~~~
251  GCATAAAAAA CAGACTACAT AATACTGTAA AACACAACAT ATCCAGTCAC
   CGTATTTTTT GTCTGATGTA TTATGACATT TTGTGTTGTA TAGGTCAGTG
301  TATGGCGGCC GCTCCCTAAC CCACGGGGCC CGTGGCTATG GCAGGGCTTG
   ATACCGCCGG CGAGGGATTG GGTGCCCCGG GCACCGATAC CGTCCCGAAC
351  CCGCCCCGAC GTTGGCTGCG AGCCCTGGGC CTTACCCGA ACTTGGGGGT
   GGCGGGGCTG CAACCGACGC TCGGGACCCG GAAGTGGGCT TGAACCCCA
401  TGGGGTGGGG AAAAGGAAGA AACGCGGGCG TATTGGTCCC AATGGGGTCT
   ACCCCACCCC TTTTCCTTCT TTGCGCCCGC ATAACCAGGG TTACCCAGGA
451  CCGTGGGGTA TCGACAGAGT GCCAGCCCTG GGACCGAACC CCGCGTTTAT
   GCCACCCCAT AGCTGTCTCA CGGTCGGGAC CCTGGCTTGG GGCGCAAATA
501  GAACAAACGA CCCAACACCC GTGCGTTTTA TTCTGTCTTT TTATTGCCGT
   CTTGTTTGCT GGGTTGTGGG CACGCAAAAT AAGACAGAAA AATAACGGCA
551  CATAGCGCGG GTTCCTTCCG GTATTGTCTC CTTCCGTGTT TCAGTTAGCC
   GTATCGCGCC CAAGGAAGGC CATAACAGAG GAAGGCACAA AGTCAATCGG
                                   ~~~
                                   tk gene
                                   N  A  E  .
601  TCCCCCATCT CCCGGGCAAA CGTGCGCGCC AGGTCGCAGA TCGTCGGTAT
   AGGGGGTAGA GGGCCCGTTT GCACGCGCGG TCCAGCGTCT AGCAGCCATA
   ~~~~~
                                   tk gene
.. G  M  E  R  A  F  T  R  A  L  D  C  I  T  P  I

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

651  GGAGCCTGGG GTGGTGACGT GGGTCTGGAC CATCCCGGAG GTAAGTTGCA
    CCTCGGACCC CACCACTGCA CCCAGACCTG GTAGGGCCTC CATTCAACGT
    /
    ~~~~~
    tk gene
    S  G  P  T    T  V  H    T  Q  V    M  G  S  T    L  Q  L  .
701  GCAGGGCGTC CCGGCAGCCG GCGGGCGATT GGTCGTAATC CAGGATAAAG
    CGTCCCGCAG GGCCGTCGGC CGCCCGCTAA CCAGCATTAG GTCCTATTTC
    ~~~~~
    tk gene
    .  L  A  D    R  C  G  A    P  S  Q    D  Y  D    L  I  F  V  .
751  ACATGCATGG GACGGAGGCG TTTGGCCAAG ACGTCCAAAG CCCAGGCAAA
    TGTACGTACC CTGCCTCCGC AAACCGGTTT TGCAGGTTTC GGGTCCGTTT
    ~~~~~
    tk gene
    .. H  M  P    R  L  R    K  A  L  V    D  L  A    W  A  F
801  CACGTTATAC AGGTCGCCGT TGGGGGCCAG CAACTCGGGG GCCCGAAACA
    GTGCAATATG TCCAGCGGCA ACCCCCGGTC GTTGAGCCCC CGGGCTTTGT
    ~~~~~
    tk gene
    V  N  Y  L    D  G  N    P  A  L    L  E  P  A    R  F  L  .
851  GGGTAAATAA CGTGTCCCCG ATATGGGGTC GTGGGCCCCG GTTGCTCTGG
    CCCATTTATT GCACAGGGGC TATACCCAG CACCCGGGCG CAACGAGACC
    ~~~~~
    tk gene
    .  T  F  L    T  D  G  I    H  P  R    P  G  A    N  S  Q  P  .
901  GGCTCGGCAC CCTGGGGCGG CACGGCCGCC CCCGAAAGCT GTCCCCAATC
    CCGAGCCGTG GGACCCCGCC GTGCCGGCGG GGGCTTTTCA CAGGGGTTAG
    ~~~~~
    tk gene
    .. E  A  G    Q  P  P    V  A  A  G    S  L  Q    G  W  D
951  CTCCCGCCAC GACCCGCCGC CCTGCAGATA CCGCACCGTA TTGGCAAGCA
    GAGGGCGGTG CTGGGCGGCG GGACGTCTAT GGCGTGGCAT AACCGTTCGT
    ~~~~~
    tk gene
    E  R  W  S    G  G  G    Q  L  Y    R  V  T  N    A  L  L  .
1001  GCCCATAAAC GCGGCGAATC GCGGCCAGCA TAGCCAGGTC AAGCCGCTCG
    CGGGTATTTG CGCCGCTTAG CGCCGGTCGT ATCGGTCCAG TTCGGCGAGC
    ~~~~~
    tk gene
    .  G  Y  V    R  R  I  A    A  L  M    A  L  D    L  R  E  G  .
1051  CCGGGGCGCT GGC GTTTTGGC CAGGCGGTCG ATGTGTCTGT CCTCCGGAAG
    GGCCCCGCGA CCGCAAACCG GTCCGCCAGC TACACAGACA GGAGGCCTTC
    ~~~~~
    tk gene
    .. P  R  Q    R  K  A    L  R  D  I    H  R  D    E  P  L

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

1101  GGCCCCCAAC ACGATGTTTG TGCCGGGCAA GGTCGGCGGG ATGAGGGCCA
      CCGGGGGTTG TGCTACAAAC ACGGCCCGTT CCAGCCGCCC TACTCCCGGT
      ~~~~~
                        tk gene
      A G L V I N T G P L T P P I L A V .
1151  CGAACGCCAG CACGGCCTGG GGGGTCATGC TGCCCATAAG GTATCGCGCG
      GCTTGCGGTC GTGCCGGACC CCCCAGTACG ACGGGTATTC CATAGCGCGC
      ~~~~~
                        tk gene
      . F A L V A Q P T M S G M L Y R A A .
1201  GCCGGGTAGC ACAGGAGGGC GGCGATGGGA TGGCGGTCGA AGATGAGGGT
      CGGCCCATCG TGTCTCCCG CCGCTACCCT ACCGCCAGCT TCTACTCCCA
      ~~~~~
                        tk gene
      .. P Y C L L A A I P H R D F I L T
1251  GAGGGCCGGG GGC GGCGCAT GTGAGCTCCC AGCCTCCCCC CCGATATGAG
      CTCCCGGCCC CCGCCCCGTA CACTCGAGGG TCGGAGGGGG GGCTATACTC
      ~~~~~
                        tk gene
      L A P P P A H S S G A E G G I H P .
1301  GAGCCAGAAC GGCGTCGGTC ACGGCATAAG GCATGCCCAT TGTTATCTGG
      CTCGGTCTTG CCGCAGCCAG TGCCGTATTC CGTACGGGTA ACAATAGACC
      ~~~~~
                        tk gene
      . A L V A D T V A Y P M G M T I Q A .
1351  GCGCTTGTC A TTACCACCGC CGCGTCCCCG GCCGATATCT CACCCTGGTC
      CGCGAACAGT AATGGTGGCG GCGCAGGGGC CGGCTATAGA GTGGGACCAG
      ~~~~~
                        tk gene
      .. S T M V V A A D G A S I E G Q D
1401  GAGGCGGTGT TGTGTGGTGT AGATGTTCGC GATTGTCTCG GAAGCCCCCA
      CTCCGCCACA ACACACCACA TCTACAAGCG CTAACAGAGC CTTGCGGGGT
      ~~~~~
                        tk gene
      L R H Q T T Y I N A I T E S A G L .
1451  ACACCCGCCA GTAAGTCATC GGCTCGGGTA CGTAGACGAT ATCGTCGCGC
      TGTGGGCGGT CATTGAGTAG CCGAGCCCAT GCATCTGCTA TAGCAGCGCG
      ~~~~~
                        tk gene
      . V R W Y T M P E P V Y V I D D R S .
1501  GAACCCAGGG CCACCAGCAG TTGCGTGGTG GTGGTTTTTC CCATCCCGTG
      CTTGGGTCCC GGTGGTCGTC AACGCACCAC CACCAAAAGG GGTAGGGCAC
      ~~~~~
                        tk gene
      .. G L A V L L Q T T T T K G M G H

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

1551  GGGACCGTCT ATATAAACCC GCAGTAGCGT GGGCATT TTC TGCTCCAGGC
      CCCTGGCAGA TATATTTGGG CGTCATCGCA CCCGTAAAAG ACGAGGTCCG
      ~~~~~
                tk gene
      P G D I Y V R L L T P M K Q E L R .
1601  GGACTTCCGT GGCTTTTTGT TGCCGGCGAG GCGCAACGC CGTACGTCGG
      CCTGAAGGCA CCGAAAACA ACGGCCGCTC CCGCGTTGCG GCATGCAGCC
      ~~~~~
                tk gene
      . V E T A K Q Q R R P R L A T R R N .
1651  TTGTTATGGC CGCGAGAACG CGCAGCCTGG TCGAACGCAG ACGCGTGTG
      AACAAATACG GCGCTCTTGC GCGTCGGACC AGCTTGCGTC TGCGCACAAC
      ~~~~~
                tk gene
      .. N H G R S R A A Q D F A S A H Q
1701  ATGGCAGGGG TACGAAGCCA TAGATCCCGT TATCAATTAC TTATACTATC
      TACCGTCCCC ATGCTTCGGT ATCTAGGGCA ATAGTTAATG AATATGATAG
      ~~~~~
                tk gene
      pr
      H C P Y S A M
1751  CGGCGCGCAA GCGAGCGTGT GCGCCGGAGC ACAATTGATA CTGATTTACG
      GCCGCGCGTT CGCTCGCACA CGCGGCCTCG TGTTAACTAT GACTAAATGC
      ~~~~~
                ie-0 pr
1801  AGTTGGGCAA ACGGGCTTTA TATAGCCTGT CCCCTCCACA GCCCTAGTGC
      TCAACCCGTT TGCCCGAAAT ATATCGGACA GGGGAGGTGT CGGGATCACG
      ~~~~~
                ie-0 pr
1851  CGTGCGCAAA GTGCCTACGT GACCAGGCTC TCCTACGCAT ATACAATCTT
      GCACGCGTTT CACGGATGCA CTGGTCCGAG AGGATGCGTA TATGTTAGAA
      ~~~~~
                ie-0 pr
1901  ATCTCTATAG ATAAGGTTTC CATATATAAA GCCTCTCGAT GGCTGAACGT
      TAGAGATATC TATTCCAAAG GTATATATTT CGGAGAGCTA CCGACTTGCA
      ~~~~~
                ie-0 pr
1951  GCACAGTATC GTGTTGATTT CTGAGTGCTA ACTAACAGTT ACAATGAACC
      CGTGTCATAG CACAATAAAA GACTCACGAT TGATTGTCAA TGTTACTTGG
      ~~~~~
                ie-0 pr
2001  GTTTTTTTTCG AGAGAATAAC ATTTTGTACG CGCCAAGGAC CGGGGGCAAG
      CAAAAAAGC TCTCTTATTG TAAAAACTGC GCGGTTCTTG GCCCCCGTTC
      ~~~~~
                ie-0 pr

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

2051  GGTCGTGCCA AATCTTTGCC AGCGCCTGCC GCCAACTCGC CGCCGTCGCC
      CCAGCACGGT TTAGAAACGG TCGCGGACGG CGGTTGAGCG GCGGCAGCGG
      ~~~~~
                        ie-0 pr
2101  TGTTCGTCCG CCGCCAAAAT CTAACATCAA ACCACCTACG CGCATCTCTC
      ACAAGCAGGC GCGGGTTTTA GATTGTAGTT TGGTGGATGC GCGTAGAGAG
      ~~~~~
                        ie-0 pr
2151  CGCCTAAACA GCCTATGTGC ACCTCTCCGG CCAAGCCGTT GGAGCACAGC
      GCGGATTTGT CGGATACACG TGGAGAGGCC GGTTTCGGCAA CCTCGTGTCTG
      ~~~~~
                        ie-0 pr
2201  AGCATTGTAA GTAAAAAACC AGTCGTCAAC AGAAAAGATG GATATTTTGT
      TCGTAACATT CATTTTTTTGG TCAGCAGTTG TCTTTTCTAC CTATAAAACA
      ~~~~~
                        ie-0 pr
2251  GCCGCCCCGAG TTTGGGAACA AGTTTGAAGG TTTGCCCGCG TACAGCGACA
      CGGCGGGGCTC AAACCCTTGT TCAAACCTTC AAACGGGGCGC ATGTCGCTGT
      ~~~~~
                        ie-0 pr
  p10 pr
2301  AACTGGATTT CAAACAAGAG CGCGATCTAC GTACCTGCAG GCCCGGGGCTC
      TTGACCTAAA GTTTGTTCTC GCGCTAGATG CATGGACGTC CGGGCCCCGAG
      ~~~~~
                        ie-0 pr
                        p10 pr
2351  AACCCAACAC AATATATTAT AGTTAAATAA GAATTATTAT CAAATCATTT
      TTGGGTGTG TTATATAATA TCAATTTATT CTTAATAATA GTTTAGTAAA
                        p10 pr
2401  GTATATTAAT TAAAATACTA TACTGTAAAT TACATTTTAT TTACAATTCA
      CATATAATTA ATTTTATGAT ATGACATTTA ATGTAAAATA AATGTTAAGT
                        lacZ
      ~~~~~
      M   T   M   I   T   D   S   L   A   V   V   L   Q   R   R   .
2451  CTCTAGAATG ACCATGATTA CGGATTCAC T GGCCGTCGTT TTACAACGTC
      GAGATCTTAC TGGTACTAAT GCCTAAGTGA CCGGCAGCAA AATGTTGCAG
                        lacZ
      ~~~~~
      .   D   W   E   N   P   G   V   T   Q   L   N   R   L   A   A   H

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

2501  GTGACTGGGA AAACCCTGGC GTTACCCAAC TTAATCGCCT TGCAGCACAT
      CACTGACCCT TTTGGGACCG CAATGGGTTG AATTAGCGGA ACGTCGTGTA
              lacZ
      ~~~~~
      P P F A S W R N S E E A R T D R P .
2551  CCCCCTTTTCG CCAGCTGGCG TAATAGCGAA GAGGCCCGCA CCGATCGCCC
      GGGGGAAAGC GGTCGACCGC ATTATCGCTT CTCCGGGCGT GGCTAGCGGG
              lacZ
      ~~~~~
      . S Q Q L R S L N G E W R F A W F P .
2601  TTCCCAACAG TTGCGCAGCC TGAATGGCGA ATGGCGCTTT GCCTGGTTTC
      AAGGGTTGTC AACGCGTCGG ACTTACCGCT TACCGCGAAA CGGACCAAAG
              lacZ
      ~~~~~
  Bsu36I
                                          ~~~~~
      . A P E A V P E S W L E C D L P E
2651  CGGCACCAGA AGCGGTGCCG GAAAGCTGGC TGGAGTGCGA TCTTCCTGAG
      GCCGTGGTCT TCGCCACGGC CTTTCGACCG ACCTCACGCT AGAAGGACTC
              lacZ
      ~~~~~
      Bsu36I
      ~
      A D T V V V P S N W Q M H G Y D A .
2701  GCCGATACTG TCGTCGTCCC CTCAAACCTGG CAGATGCACG GTTACGATGC
      CGGCTATGAC AGCAGCAGGG GAGTTTGACC GTCTACGTGC CAATGCTACG
              lacZ
      ~~~~~
      . P I Y T N V T Y P I T V N P P F V .
2751  GCCCATCTAC ACCAACGTAA CCTATCCCAT TACGGTCAAT CCGCCGTTTG
      CGGGTAGATG TGGTTGCATT GGATAGGGTA ATGCCAGTTA GGCGGCAAAC
              lacZ
      ~~~~~
      . P T E N P T G C Y S L T F N V D
2801  TTCCCACGGA GAATCCGACG GGTGTTACT CGCTCACATT TAATGTTGAT
      AAGGGTGCCT CTTAGGCTGC CCAACAATGA GCGAGTGTA ATTACAATA
              lacZ
      ~~~~~
      E S W L Q E G Q T R I I F D G V N .
2851  GAAAGCTGGC TACAGGAAGG CCAGACGCGA ATTATTTTTC ATGGCGTTAA
      CTTTCGACCG ATGTCCTTCC GGTCTGCGCT TAATAAAAAC TACCGCAATT
              lacZ
      ~~~~~
      . S A F H L W C N G R W V G Y G Q D .

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

2901   CTCGGCGTTT CATCTGTGGT GCAACGGGCG CTGGGTCGGT TACGGCCAGG
      GAGCCGCAAA GTAGACACCA CGTTGCCCGC GACCCAGCCA ATGCCGGTCC
              lacZ
      ~~~~~
      ·   S   R   L   P   S   E   F   D   L   S   A   F   L   R   A   G
2951   ACAGTCGTTT GCCGTCTGAA TTTGACCTGA GCGCATTTTT ACGCGCCGGA
      TGTCAGCAAA CGGCAGACTT AAAGTGGACT CGCGTAAAAA TGC GCGGCCT
              lacZ
      ~~~~~
      E   N   R   L   A   V   M   V   L   R   W   S   D   G   S   Y   L   ·
3001   GAAAACCGCC TCGCGGTGAT GGTGCTGCGT TGGAGTGACG GCAGTTATCT
      CTTTTGGCGG AGCGCCACTA CCACGACGCA ACCTCACTGC CGTCAATAGA
              lacZ
      ~~~~~
      ·   E   D   Q   D   M   W   R   M   S   G   I   F   R   D   V   S   L   ·
3051   GGAAGATCAG GATATGTGGC GGATGAGCGG CATTTTCCGT GACGTCTCGT
      CCTTCTAGTC CTATACACCG CCTACTCGCC GTAAAAGGCA CTGCAGAGCA
              lacZ
      ~~~~~
      ·   L   H   K   P   T   T   Q   I   S   D   F   H   V   A   T   R
3101   TGCTGCATAA ACCGACTACA CAAATCAGCG ATTTCCATGT TGCCACTCGC
      ACGACGTATT TGGCTGATGT GTTTAGTCGC TAAAGGTACA ACGGTGAGCG
              lacZ
      ~~~~~
      F   N   D   D   F   S   R   A   V   L   E   A   E   V   Q   M   C   ·
3151   TTAAATGATG ATTTTCAGCCG CGCTGTACTG GAGGCTGAAG TTCAGATGTG
      AAATTACTAC TAAAGTCGGC GCGACATGAC CTCCGACTTC AAGTCTACAC
              lacZ
      ~~~~~
      ·   G   E   L   R   D   Y   L   R   V   T   V   S   L   W   Q   G   E   ·
3201   CGGCGAGTTG CGTGACTACC TACGGGTAAC AGTTTCTTTA TGGCAGGGTG
      GCCGCTCAAC GCACTGATGG ATGCCCATTTG TCAAAGAAAT ACCGTCCCAC
              lacZ
      ~~~~~
      ·   T   Q   V   A   S   G   T   A   P   F   G   G   E   I   I   D
3251   AAACGCAGGT CGCCAGCGGC ACCGCGCCTT TCGGCGGTGA AATTATCGAT
      TTTGCGTCCA GCGGTCGCCG TGGCGCGGAA AGCCGCCACT TTAATAGCTA
              lacZ
      ~~~~~
      E   R   G   G   Y   A   D   R   V   T   L   R   L   N   V   E   N   ·
3301   GAGCGTGGTG GTTATGCCGA TCGCGTCACA CTACGTCTGA ACGTCGAAAA
      CTCGCACCAC CAATACGGCT AGCGCAGTGT GATGCAGACT TGCAGCTTTT
              lacZ
      ~~~~~
      ·   P   K   L   W   S   A   E   I   P   N   L   Y   R   A   V   V   E   ·

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

3351   CCCGAACTG TGGAGCGCCG AAATCCCGAA TCTCTATCGT GCGGTGGTTG
      GGGCTTTGAC ACCTCGCGGC TTTAGGGCTT AGAGATAGCA CGCCACCAAC
              lacZ
      ~~~~~
      ·   L   H   T   A   D   G   T   L   I   E   A   E   A   C   D   V
3401   AACTGCACAC CGCCGACGGC ACGCTGATTG AAGCAGAAGC CTGCGATGTC
      TTGACGTGTG GCGGCTGCCG TGCRACTAAC TTCGTCTTCG GACGCTACAG
              lacZ
      ~~~~~
      G   F   R   E   V   R   I   E   N   G   L   L   L   L   N   G   K   ·
3451   GGTTTCCGCG AGGTGCGGAT TGAAATGGT CTGCTGCTGC TGAACGGCAA
      CCAAAGGCGC TCCACGCCTA ACTTTTACCA GACGACGACG ACTTGCCGTT
              lacZ
      ~~~~~
      ·   P   L   L   I   R   G   V   N   R   H   E   H   H   P   L   H   G   ·
3501   GCCGTTGCTG ATTCGAGGCG TTAACCGTCA CGAGCATCAT CCTCTGCATG
      CGGCAACGAC TAAGCTCCGC AATTGGCAGT GCTCGTAGTA GGAGACGTAC
              lacZ
      ~~~~~
      ·   Q   V   M   D   E   Q   T   M   V   Q   D   I   L   L   M   K
3551   GTCAGGTCAT GGATGAGCAG ACGATGGTGC AGGATATCCT GCTGATGAAG
      CAGTCCAGTA CCTACTCGTC TGCTACCACG TCCTATAGGA CGACTACTTC
              lacZ
      ~~~~~
      Q   N   N   F   N   A   V   R   C   S   H   Y   P   N   H   P   L   ·
3601   CAGAACAAC TTAACGCCGT GCGCTGTTCG CATTATCCGA ACCATCCGCT
      GTCTTGTTGA AATTGCGGCA CGCGACAAGC GTAATAGGCT TGGTAGGCGA
              lacZ
      ~~~~~
      ·   W   Y   T   L   C   D   R   Y   G   L   Y   V   V   D   E   A   N   ·
3651   GTGGTACACG CTGTGCGACC GCTACGGCCT GTATGTGGTG GATGAAGCCA
      CACCATGTGC GACACGCTGG CGATGCCGGA CATAACCAC CTACTTCGGT
              lacZ
      ~~~~~
      ·   I   E   T   H   G   M   V   P   M   N   R   L   T   D   D   P
3701   ATATTGAAAC CCACGGCATG GTGCCAATGA ATCGTCTGAC CGATGATCCG
      TATAACTTTG GGTGCCGTAC CACGGTTACT TAGCAGACTG GCTACTAGGC
              lacZ
      ~~~~~
      R   W   L   P   A   M   S   E   R   V   T   R   M   V   Q   R   D   ·
3751   CGCTGGCTAC CGGCGATGAG CGAACGCGTA ACGCGAATGG TGCAGCGCGA
      GCGACCGATG GCCGCTACTC GCTTGCGCAT TGCGCTTACC ACGTCGCGCT
              lacZ
      ~~~~~
      ·   R   N   H   P   S   V   I   I   W   S   L   G   N   E   S   G   H   ·

```



Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```
3801   TCGTAATCAC CCGAGTGTGA TCATCTGGTC GCTGGGGAAT GAATCAGGCC
      AGCATTAGTG GGCTCACACT AGTAGACCAG CGACCCCTTA CTTAGTCCGG
              lacZ
      ~~~~~
      · G A N   H D A   L Y R W   I K S   V D P
3851   ACGGCGCTAA TCACGACGCG CTGTATCGCT GGATCAAATC TGTCGATCCT
      TGCCGCGATT AGTGCTGCGC GACATAGCGA CCTAGTTTAG ACAGCTAGGA
              lacZ
      ~~~~~
      S R P V   Q Y E   G G G   A D T T   A T D ·
3901   TCCCGCCCGG TGCAGTATGA AGGCGGCGGA GCCGACACCA CGGCCACCGA
      AGGGCGGGCC ACGTCATACT TCCGCCGCCT CGGCTGTGGT GCCGGTGGCT
              lacZ
      ~~~~~
      · I I C   P M Y A   R V D   E D Q   P F P A ·
3951   TATTATTTGC CCGATGTACG CGCGCGTGGA TGAAGACCAG CCCTTCCCGG
      ATAATAAACG GGCTACATGC GCGCGCACCT ACTTCTGGTC GGGAAGGGCC
              lacZ
      ~~~~~
      · V P K   W S I   K K W L   S L P   G E T
4001   CTGTGCCGAA ATGGTCCATC AAAAAATGGC TTTCGCTACC TGGAGAGACG
      GACACGGCTT TACCAGGTAG TTTTTTACCG AAAGCGATGG ACCTCTCTGC
              lacZ
      ~~~~~
      R P L I   L C E   Y A H   A M G N   S L G ·
4051   CGCCCGCTGA TCCTTTGCGA ATACGCCAC GCGATGGGTA ACAGTCTTGG
      GCGGGCGACT AGGAAACGCT TATGCGGGTG CGCTACCCAT TGTCAGAACC
              lacZ
      ~~~~~
      · G F A   K Y W Q   A F R   Q Y P   R L Q G ·
4101   CGGTTTCGCT AAATACTGGC AGGCGTTTCG TCAGTATCCC CGTTTACAGG
      GCCAAAGCGA TTTATGACCG TCCGCAAAGC AGTCATAGGG GCAAATGTCC
              lacZ
      ~~~~~
      · G F V   W D W   V D Q S   L I K   Y D E
4151   GCGGCTTCGT CTGGGACTGG GTGGATCAGT CGCTGATTAA ATATGATGAA
      CGCCGAAGCA GACCCTGACC CACCTAGTCA GCGACTAATT TATACTACTT
              lacZ
      ~~~~~
      N G N P   W S A   Y G G   D F G D   T P N ·
4201   AACGGCAACC CGTGGTTCGC TTACGGCGGT GATTTTGGCG ATACGCCGAA
      TTGCCGTTGG GCACCAGCCG AATGCCGCCA CTAAAACCGC TATGCGGCTT
              lacZ
      ~~~~~
      · D R Q   F C M N   G L V   F A D   R T P H ·
```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

4251  CGATCGCCAG TTCTGTATGA ACGGTCTGGT CTTTGCCGAC CGCACGCCGC
      GCTAGCGGTC AAGACATACT TGCCAGACCA GAAACGGCTG GCGTGCGGCG
              lacZ
      ~~~~~
      · P A L T E A K H Q Q Q F F Q F R
4301  ATCCAGCGCT GACGGAAGCA AAACACCAGC AGCAGTTTTT CCAGTTCGGT
      TAGGTCGCGA CTGCCTTCGT TTTGTGGTCG TCGTCAAAAA GTCAAGGCA
              lacZ
      ~~~~~
      L S G Q T I E V T S E Y L F R H S ·
4351  TTATCCGGGC AAACCATCGA AGTGACCAGC GAATACCTGT TCCGTCATAG
      AATAGGCCCG TTTGGTAGCT TCACTGGTCG CTTATGGACA AGGCAGTATC
              lacZ
      ~~~~~
      · D N E L L H W M V A L D G K P L A ·
4401  CGATAACGAG CTCCTGCACT GGATGGTGGC GCTGGATGGT AAGCCGCTGG
      GCTATTGCTC GAGGACGTGA CCTACCACCG CGACCTACCA TTCGGCGACC
              lacZ
      ~~~~~
      · S G E V P L D V A P Q G K Q L I
4451  CAAGCGGTGA AGTGCCTCTG GATGTCGCTC CACAAGGTAA ACAGTTGATT
      GTTCGCCACT TCACGGAGAC CTACAGCGAG GTGTTCCATT TGTCAACTAA
              lacZ
      ~~~~~
      E L P E L P Q P E S A G Q L W L T ·
4501  GAACTGCCTG AACTACCGCA GCCGGAGAGC GCCGGGCAAC TCTGGCTCAC
      CTTGACGGAC TTGATGGCGT CGGCCTCTCG CGGCCCGTTG AGACCGAGTG
              lacZ
      ~~~~~
      · V R V V Q P N A T A W S E A G H I ·
4551  AGTACGCGTA GTGCAACCGA ACGCGACCGC ATGGTCAGAA GCCGGGCACA
      TCATGCGCAT CACGTTGGCT TGCCTGGCG TACCAGTCTT CGGCCCGTGT
              lacZ
      ~~~~~
      · S A W Q Q W R L A E N L S V T L
4601  TCAGCGCCTG GCAGCAGTGG CGTCTGGCGG AAAACCTCAG TGTGACGCTC
      AGTCGCGGAC CGTCGTCACC GCAGACCGCC TTTTGGAGTC AACTGCGAG
              lacZ
      ~~~~~
      P A A S H A I P H L T T S E M D F ·
4651  CCCGCCGCGT CCCACGCCAT CCCGCATCTG ACCACCAGCG AAATGGATTT
      GGGCGGCGCA GGGTGCGGTA GGGCGTAGAC TGGTGGTCGC TTTACCTAAA
              lacZ
      ~~~~~
      · C I E L G N K R W Q F N R Q S G F ·

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

4701  TTGCATCGAG CTGGGTAATA AGCGTTGGCA ATTTAACCGC CAGTCAGGCT
      AACGTAGCTC GACCCATTAT TCGCAACCGT TAAATTGGCG GTCAGTCCGA
              lacZ
      ~~~~~
      ·  L  S  Q    M  W  I    G  D  K  K    Q  L  L    T  P  L
4751  TTCTTTCACA GATGTGGATT GGCATAAAAA AACAACTGCT GACGCCGCTG
      AAGAAAGTGT CTACACCTAA CCGCTATTTT TTGTTGACGA CTGCGGCGAC
              lacZ
      ~~~~~
      R  D  Q  F    T  R  A    P  L  D    N  D  I  G    V  S  E  ·
4801  CGCGATCAGT TCACCCGTGC ACCGCTGGAT AACGACATTG GCGTAAGTGA
      GCGCTAGTCA AGTGGGCACG TGGCGACCTA TTGCTGTAAC CGCATTCACT
              lacZ
      ~~~~~
      ·  A  T  R    I  D  P  N    A  W  V    E  R  W    K  A  A  G  ·
4851  AGCGACCCGC ATTGACCCTA ACGCCTGGGT CGAACGCTGG AAGGCGGCGG
      TCGCTGGGCG TAACTGGGAT TCGGACCCA GCTTGCGACC TTCCGCCGCC
              lacZ
      ~~~~~
      ·  H  Y  Q    A  E  A    A  L  L  Q    C  T  A    D  T  L
4901  GCCATTACCA GGCCGAAGCA GCGTTGTTGC AGTGCACGGC AGATACACTT
      CGGTAATGGT CCGGCTTCGT CGCAACAACG TCACGTGCCG TCTATGTGAA
              lacZ
      ~~~~~
      A  D  A  V    L  I  T    T  A  H    A  W  Q  H    Q  G  K  ·
4951  GCTGATGCGG TGCTGATTAC GACCGCTCAC GCGTGGCAGC ATCAGGGGAA
      CGACTACGCC ACGACTAATG CTGGCGAGTG CGCACCGTCG TAGTCCCCTT
              lacZ
      ~~~~~
      ·  T  L  F    I  S  R  K    T  Y  R    I  D  G    S  G  Q  M  ·
5001  AACCTTATTT ATCAGCCGGA AAACCTACCG GATTGATGGT AGTGGTCAAA
      TTGGAATAAA TAGTCGGCCT TTTGGATGGC CTAATACTA TCACCACTTT
              lacZ
      ~~~~~
      ·  A  I  T    V  D  V    E  V  A  S    D  T  P    H  P  A
5051  TGGCGATTAC CGTTGATGTT GAAGTGGCGA GCGATACACC GCATCCGGCG
      ACCGCTAATG GCAACTACAA CTTACCGCT CGCTATGTGG CGTAGGCCGC
              lacZ
      ~~~~~
      R  I  G  L    N  C  Q    L  A  Q    V  A  E  R    V  N  W  ·
5101  CGGATTGGCC TGAAGTGGCA GCTGGCGCAG GTAGCAGAGC GGGTAACTG
      GCCTAACCGG ACTTGACGGT CGACCGCGTC CATCGTCTCG CCCATTGAC
              lacZ
      ~~~~~
      ·  L  G  L    G  P  Q  E    N  Y  P    D  R  L    T  A  A  C  ·

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```

5151  GCTCGGATTA GGGCCGCAAG AAAACTATCC CGACCGCCTT ACTGCCGCCT
      CGAGCCTAAT CCCGGCGTTC TTTTGATAGG GCTGGCGGAA TGACGGCGGA
              lacZ
      ~~~~~
      ·  F  D  R    W  D  L    P  L  S  D    M  Y  T    P  Y  V
5201  GTTTTGACCG CTGGGATCTG CCATTGTCAG ACATGTATAC CCCGTACGTC
      CAAAACCTGGC GACCCTAGAC GGTAACAGTC TGTACATATG GGCATGCAG
              lacZ
      ~~~~~
      F  P  S  E    N  G  L    R  C  G    T  R  E  L    N  Y  G  ·
5251  TTCCCGAGCG AAAACGGTCT GCGCTGCGGG ACGCGCGAAT TGAATTATGG
      AAGGGCTCGC TTTTGCCAGA CGCGACGCC  TGC GCGCTTA ACTTAATACC
              lacZ
      ~~~~~
      ·  P  H  Q    W  R  G  D    F  Q  F    N  I  S    R  Y  S  Q  ·
5301  CCCACACCAG TGGCGCGGCG ACTTCCAGTT CAACATCAGC CGCTACAGTC
      GGGTGTGGTC ACCGCGCCGC TGAAGGTCAA GTTGTAGTCG GCGATGTCAG
              lacZ
      ~~~~~
      ·  Q  Q  L    M  E  T    S  H  R  H    L  L  H    A  E  E
5351  AACAGCAACT GATGGAAACC AGCCATCGCC ATCTGCTGCA CGCGGAAGAA
      TTGTCGTTGA CTACCTTTGG TCGGTAGCGG TAGACGACGT GCGCCTTCTT
              lacZ
      ~~~~~
      G  T  W  L    N  I  D    G  F  H    M  G  I  G    G  D  D  ·
5401  GGCACATGGC TGAATATCGA CGGTTTCCAT ATGGGGATTG GTGGCGACGA
      CCGTGTACCG ACTTATAGCT GCCAAAGGTA TACCCCTAAC CACCGCTGCT
              lacZ
      ~~~~~
      ·  S  W  S    P  S  V  S    A  E  F    Q  L  S    A  G  R  Y  ·
5451  CTCCTGGAGC CCGTCAGTAT CGGCGGAATT CCAGCTGAGC GCCGGTCGCT
      GAGGACCTCG GGCAGTCATA GCCGCCTTAA GGTCGACTCG CGGCCAGCGA
              lacZ                                     AttR2
      ~~~~~
      ·  H  Y  Q    L  V  W    C  Q  K
5501  ACCATTACCA GTTGGTCTGG TGTCAAAAAT AATGACTGCA GGTCGACCAT
      TGGTAATGGT CAACCAGACC ACAGTTTTTA TTA CTGACGT CCAGCTGGTA
              AttR2
      ~~~~~
      AGTGACTGGA TATGTTGTGT TTTACAGTAT TATGTAGTCT GTTTTTTATG
5551  TCACTGACCT ATACAACACA AAATGTCATA ATACATCAGA CAAAAAATAC
              AttR2
      ~~~~~

```

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

```
5601  CAAAATCTAA  TTTAATATAT  TGATATTTAT  ATCATTTTAC  GTTCTCTCGTT
      GTTTTAGATT  AAATTATATA  ACTATAAATA  TAGTAAAATG  CAAAGAGCAA
            AttR2                                V5/His
      ~~~~~~                                     ~~~~~~
                                           G  K  P
5651  CAGCTTTCTT  GTACAAAGTG  GTGAGAATGA  ATGAAGATCT  GGGGAAGCCT
      GTCGAAAGAA  CATGTTTCAC  CACTCTTACT  TACTTCTAGA  CCCCTTCGGA
                        V5/His
      ~~~~~~
      I  P  N  P  L  L  G  L  D  S  T  R  T  G  H  H  H
5701  ATCCCTAACC  CTCTCCTCGG  TCTCGATTCT  ACGCGTACCG  GTCATCATCA
      TAGGGATTGG  GAGAGGAGCC  AGAGCTAAGA  TGCGCATGGC  CAGTAGTAGT
                        stop codon
                        ~~~
                        V5/His
      ~~~~~~
      ·  H  H  H
5751  CCATCACCAT  TGA
      GGTAGTGGTA  ACT
```

Please amend Table 15 on pages 429 and 430 as follows:

Table 15: Baculoviral promoter sequences.

AcMNPV ORF 25 promoter (SEQ ID NO: 98)

Ggtgtcttcattagtagtccaatcacgtacgcaacagtcgcaaaagaaacacacagtttcgtctccgcgacccgtgtaaaaaagtcgccgtt  
ccgcaatgtttgtaaatcatgtcacgcaatgcggcaggccaaaagttaacaaacgtatccatacgcgactgtaaattggacatgcatctgtaca  
cacacttgggtttgccttcttactagtagcagcgttgatggaatgttgcgcaaacgattcacgctcggcgatctttagcatatcgcgcaa  
tacggcgacaagggttacgtgtgcatattcaatacactcgtcttcggaccaatttttattctgcttcgcaatactcgcacacaacgtgatcgtca  
acttgattgtatttaaaccggttaacgatcaagctgttaataaacgccgtgtttcaatgggataatttcaaacgaactatgtcttttattaaacatg  
tcgaatacgtgttcggcgggtgtgtgcgcgaaagtgtcacacacgctgataaaataaacgggggcgtgtcctcgttcattttagctcgttaaa  
gttacggtaaaaatgagcacgtttgcgtcgtttggttagcgacagctttatatggccagtttggtttgttcggcgtaaatgacgtgcactg  
tggacaaatcgtgttctaaactacaaactgtactcgaaaatgttgatagtgtgtagccgatctatctaaataaacttttgcaactc  
gctgatagagcacacgtccacatactgtcgataaaccggtgtcaaccgctcaaaacgggtgaatgttagcttgaaaggggcgcatttg  
gaatgactaaaagggaatatttttaataaatcgtcagtagtgtagcgaacgcgtgtgtacgcacatgctggcaacagagtcgtccatattat  
tatatacttatattctgtgaacacttcaattagacttgaaccacagcagacgcgcacgtcggtagc

AcMNPV lef 3 promoter (SEQ ID NO: 99)

Ccgagaagaaggcggtttgtataaaacccattttcgaaatggttaacaaactgttttagcatttggatcgtttcgtgttcaaacgcgtcgaaaa  
cttttaaacgcaattgccgccgggacgcaggcaataaaattagctgcgtctcgcatgatcaaatcaagttgagacgttctgttcgttt  
tcgcgtccattaacgtcaaccgagccatctgccaacaccagatcgcacgcgttgccacacttgatgctaactcaatacaaacattttatcaa  
acacgtcgcctgacttgcgggccccgtaatggtgtgaaattttgcgtttgcgcactgtcgggtttgtacacgcacaccgagttgtttgtcaac  
gtgacgccatagctttgcaaagcgggttaacgacatggtatagttggcaaacctgcccgggtccgccgacaaatcaaaaacgtgtcaa  
cgtgtcggcaaacgtgaaacttttgcgatctctgatagttttgcgaacatctaggtctgcgcgttgggcgtttgtcaataattttgagcgag  
cgcaaacaccgactgtgtgtaacgtgttcaaacatctttgagtttatttaattttgtgcaacattttactcttctgtcgtcggtcgcaatgttt  
gtgtcgaaaaagacggccaacacgctcagcaaaactatacaataaagaacaaaaatacgtacgcaatattaacattgaccgtttgatcgtt  
aaatcgagcgggtctgttcagagccgctcttattctctcgttgatattgttaaagttttgttttaattgtacacaatcggcgtgtgtagtcga  
aattttcaaaatcggcgttttgaaacattgttctgaacgtgtgtgcgagcggcgtgtgtggtggcacgtttataatcaactccctccacgctaacg  
aacgggtgctctggcgacacttcgatttcgtcgccattcagttttgccatcggatagattcccatatcgacaacagcaat

AcMNPV TLP promoter (SEQ ID NO: 100)

tgtagcccaattggccactgtgtgacgaaatcgtcgtcaacgtgtttgaatacatgttgccccgtaccgttgggtaaatctatgcatctgga  
gtcgcgggaacactcgtactggtgtcagagtttctgatccgggtgatgcacgttatcagttgtgactcgttattattcaaacatttgaaatattgc  
gtgtcgccgatcggccgttatgtacgtgtgtccggcgccgttaaacgcgcacggatgcgttcacgcacgacattaagttgcgatcaaa  
tatttattcgcggggcattcggccaccacgtggcgccatttacgactgcataaactggttgacgagcaaatggagggaagtagatgata  
gtatatagccgtctggcctgtttcacacaattcgttaactttacactggccggtttccgcgtcaaacgtgtaattatctggacattcttcgactgc  
gtgcgtcctgtttgcaaaacacctaagatagaacgtgggatgatacaagtcgcggttgtagaataatctttgtcaaagtgttggttaacac  
caacgtgtccagcaaacgctcgtccatgggataaagaccggcagactgtgtgcacggcggcacgggaacacattttagttgtgcgtaa  
tcaaggttaaaatcgcggggcatttcattgtcacgtcggcctgtgcgcgtcaaaataaactcgttgggattttcatcatttgcctaacgcg  
atcgtgtacgattcgaacaggttgaaattttgatttaagaaatcaaaatttcaatccggtcacatgcacgcttctgtgataggtggaag  
gtcgacgggtgttgaaacacgttacaataaagtgtttgcataatatccgacacgtacgttattacgtcgggtgtgggttcgtcgttggtgc  
gcttcacataatcagtcacttgagccgcttggtgaaagtcgtttcgtcaaatcaaaataaattgccaataacattaaagtaaacgctatta  
taagaaaaagctt

Table 15 (continued) Baculoviral promoter sequences.

AcMNPV hr5 sequence (SEQ ID NO: 101)

Gttttacgcgtagaattctacccgtaaagcgagtttagttatgagccatgtgcaaacatgacatcagctttttataacaaatgacatcatt  
tcttgattgtgtttacacgtagaattctactcgtaaagcgagttcagtttgaaaaacaaatgacatcatcttttgattgtgctttacaagtagaat  
tctacccgtaaatacaagttcggtttgaaaaacaaatgagtcattgtatgatacatattgcaaacaaatgactcatcaatcgatcgtgcgtac  
acgtagaattctactcgtaaagcgagtttagagccgtgtgcaaacatgacatcatctcgattgaaaaacaaatgacatcatccactgatcg  
tgcgttacaagtagaattctactcgtaaagccagttcggtttagagccgtgtgcaaacatgacatcagcttatgactcgacttgattgtgttt  
acgcgtagaattctactcgtaaagc

Please amend Table 16 on page 431 as follows:

Table 16: IE-1 promoter, coding, and polypeptide sequence.

AcMNPV IE-1 promoter (SEQ ID NO: 102)

Gttttacgcgtagaattctacccgtaaagcgagtttagttatgagccatgtgcaaacatgacatcagcttttattttataacaaatgacatcatt  
tcttgattgtgttttacacgtagaattctactcgtaaagcgagttcagtttgaaaaacaaatgacatcatcttttgattgtgctttacaagtagaat  
tctacccgtaaatacaagttcggtttgaaaaacaaatgagtcattgtatgatatcatattgcaacaaatgactcatcaatcgtcgtcgtac  
acgtagaattctactcgtaaagcgagtttagagccgtgtgcaaacatgacatcatctcgatttgaaaaacaaatgacatcatccactgatcg  
tgcgttacaagtagaattctactcgtaaagccagttcggttagagccgtgtgcaaacatgacatcagcttatgactcgtacttgattgtgttt  
acgcgtagaattctactcgtaaagc

AcMNPV IE-1 coding sequence (SEQ ID NO: 103)

atgacgcaaattaattttaacgcgtcgtacaccagcgcttcgacgccgtcccgagcgtcgttcgacaacagctattcagagttttgtataaa  
caaccaacgactatttaagttattataaccatcccaccccggtaggagccgacagcgtgatatctgacagcgagactgcggcagcttcaa  
acttttggcaagcgtcaactcgttaactgataatgatttagtggaatgtttgctcaagaccactgataatctcgaagaagcagtttagttctgctt  
attattcggaatccctgagcagcctgttggtgagcaaccatcgcccagttctgcttatcatgcggaatctttgagcattctgctggtgtgaac  
caaccatcggaactggaactaaacggaagctggacgaatacttgacaattcacaaggtgtggtgggccagtttaacaaaattaaattga  
ggcctaaatacaagaaaagcacaattcaagctgtgcaaccctgaacagacaattaatcacaacacgaacatttgacggctcgttcaact  
caagaaattacgattattttactaatgattttgcgccgtatttaaatgcgttcgacgacaacgactacaattccaacaggttctccgaccatatgt  
ccgaaactggttattacatgtttgtggttaaaaaagtgaagtgaagccgttgaaattatatttgcaagtagtgagcaatgtggtttacgaat  
atacaacaattattacatggtagataatcgctgtgttgtaacttttgataaaattagggtttatgatttcgtacaatttggttaagaaccggc  
atagaaattcctcattctcaagatgtgtgcaacgacgagacggctgcacaaaattgtaaaaaatgccatttcgtcgatgtgcaccacacgttta  
aagctgctctgacttcatttttaatttagatatgtattacgcgcaaacacatttgactttgttacaatcgttgggcgaaagaaaatgtgggtt  
tcttttagcaagttgtacgaaatgtatcaagataaaaaattttactttgcctattatgcttagtcgtaaagagagtaataaattgagactgcatt  
ctaataatttcttgtatcgccgtatgtgagtcataattaaagtattcgaaagtgtgcagttcccgacaatcccccaacaaatattgtggtgg  
acaatttaatttaattgtaacaaaaaagtagcgtcacgtacaaatacagcagcgtcgtaattctttgttaataattataaatatcatgacaat  
attgcgagtaataataacgcagaaaattaaaaaaggttaagaaggagcggcagcatgcacattgtcgaacagattttgactcagaatgt  
agataatgtaaagggtcacaattttatagattgtctttcaaaaacgaggagcgattgactatagctaagaaaaacaaagagttttattggatttc  
tggcgaaattaaagatgtagacgtagtcaagtaattcaaaaatataatagatttaagcatcacatgtttgtaatcggttaaagtgaaccgaaga  
gagagcactacattgcacaataattgttaaaattgttagctttaattacagggtctggttccgttgccgacgctataacgtttgcggaacaa  
aaactaaattgtaaatataaaaaattcgaatttaaat

AcMNPV IE-1 protein sequence (SEQ ID NO: 104)

Mtqinfnasysastpsrasfdnsyefcdkqpndylsyynhptpdgadtvisdsetaaasnflasvnsitdndlvecllkttdnleeavs  
sayysesleqpvpveqpspsayhaesfehsagvnpqpsatgtrkldeyldnsqgvvgqfnkiklrpkkykstiqtscatleqtinhntni  
ctvastqeithyftndfapylmrddndynsnrfsdhmsetgyymfvvkksevpfeiiakyvsnvvyeytnnyymvdnrvfvvt  
fdkirfmisynlvketgieiphsqdvendetaaqnckkchfvdvhhtfkaaltsyfnldmyyaqttfvllqslgerkcgflsklyemy  
qdknlfplmlsrkesneietasnnffvspyvsqilkysesvqfpdnppnkyyvndlnlnlvnkkstltykyssvanllfnnykyhdnia  
snnaenlkkvkkgedgsmhiveqyltqnvdnvkghnfvlskneerltiakknkefywisgeikdvdvsqviqkynrfkhmfvi  
gkvnrrestllhnnllklallilqlplsdaitfaeqklncykkkfefn



Please amend Table 17 on pages 432-434 as follows:

Table 17: Nucleotide sequence of plasmid pLenti6/V5-DEST (SEQ ID NO: 105).

```
AATGTAGTCTTATGCAATACTCTTGTAGTCTTGCAACATGGTAACGATGAGTTAGCAACATGCCTTACAA
GGAGAGAAAAAGCACCGTGCATGCCGATTGGTGGAAGTAAGGTGGTACGATCGTGCCTTATTAGGAAGGC
AACAGACGGGTCTGACATGGATTGGACGAACCACTGAATTGCCGCATTGCAGAGATATTGTATTTAAGTG
CCTAGCTCGATACATAAACGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTGGCTAACTA
GGGAACCCACTGCTTAAGCCTCAATAAAGCTTGCCCTTGAGTGCCTTCAAGTAGTGTGTGCCCGTCTGTTGT
GTGACTCTGGTAACTAGAGATCCCTCAGACCCCTTTTAGTCAGTGTGGAATCTCTAGCAGTGGCGCCCCG
AACAGGGACTTGAAAGCGAAAGGGAAACCAGAGGAGCTCTCTCGACGCAGGACTCGGCTTGCTGAAGCGC
GCACGGCAAGAGGCGAGGGGCGGCGACTGGTGAGTACGCCAAAAATTTTACTAGCGGAGGCTAGAAGGA
GAGAGATGGGTGCGAGAGCGTCAGTATTAAGCGGGGAGAAATTAGATCGCGATGGGAAAAAATTCGGTTA
AGGCCAGGGGAAAGAAAAAATATAAATTTAAACATATAGTATGGGCAAGCAGGGAGCTAGAACGATTTCG
CAGTTAATCCTGGCCTGTTAGAAACATCAGAAGGCTGTAGACAAATACTGGGACAGCTACAACCATCCCT
TCAGACAGGATCAGAAGAACTTAGATCATTATATAATACAGTAGCAACCCTCTATTGTGTGCATCAAAGG
ATAGAGATAAAAGACACCAAGGAAGCTTTAGACAAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG
CACAGCAAGCGGCCGCTGATCTTCAGACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTGAATTAT
ATAAATATAAAGTAGTAAAAAATTGAACCATTAGGAGTAGCACCCACCAAGGCAAAGAGAAGAGTGGTGCA
GAGAGAAAAAAGAGCAGTGGGAATAGGAGCTTTGTTCCCTTGGGTTCTTGGGAGCAGCAGGAAGCACTATG
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCGGTATAGTGCAGCAGCAGAACCA
ATTTGCTGAGGGCTATTGAGGCGCAACAGCATCTGTTGCAACTCACAGTCTGGGGCATCAAGCAGCTCCA
GGCAAGAATCCTGGCTGTGGAAAGATACCTAAAGGATCAACAGCTCCTGGGGATTTGGGGTTGCTCTGGA
AAACTCATTTGCACCACTGCTGTGCCTTGGAAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTGGA
ATCACACGACCTGGATGGAGTGGGACAGAGAAATTAACAATTACACAAGCTTAATACTCCTTAATTGA
AGAATCGCAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGGAATTAGATAAATGGGCAAGTTTGTGG
AATTGGTTTAACATAACAAATTGGCTGTGGTATATAAAATTATTACATAATGATAGTAGGAGGCTTGGTAG
GTTTAAGAATAGTTTTTGTCTGTACTTTCTATAGTGAATAGAGTTAGGCAGGGATATTCACCATTATCGTT
TCAGACCCACCTCCCAACCCCGAGGGGACCCGACAGGCCCGAAGGAATAGAAGAAGAAGGTGGAGAGAGA
GACAGAGACAGATCCATTGATTAGTGAACGGATCTCGACGGTATCGATAAGCTTGGGAGTTCCGCGTTA
CATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGAC
GTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTACGGTAAACT
GCCCCCTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAAT
GGCCCGCCTGGCATTATGCCAGTACATGACCTTATGGGACTTTCTACTTGGCAGTACATCTACGTATT
AGTCATCGCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTGACTCA
CGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTGTTTGGCACCAAAATCAACGGGACT
TTCCAAAATGTGCTAACAACCTCCGCCCATTGACGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTA
TATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCAT
AGAAGACACCGACTCTAGAGGATCCACTAGTCCAGTGTGGTGGAAATCTGCAGATATCAACAAGTTTGTGTA
CAAAAAGCTGAACGAGAAACGTAAATGATATAAATATCAATATATTAATTAATTAATTTGATTTAAACG
CAGACTACATAATACTGTAAAAACACAATATCCAGTCACATATGGCGGCCGATTAGGCACCCAGGCTT
TACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTTTGAAGTTAGGATCCGGCGAGATTTTACAGGAGCT
AAGGAAGCTAAAATGGAGAAAAAATCACTGGATATACCACCGTTGATATATCCCAATGGCATCGTAAAG
AACATTTTGAAGCATTTTCAAGTCAGTTGCTCAATGTACCTATAACCAGACCGTTTCAAGTGGATATTACGGC
CTTTTTAAAGACCGTAAAGAAAAATAAGCACAAGTTTTATCCGGCCTTTATTACATTCTTGCCCCGCTG
ATGAATGCTCATCCGGAATTCGGTATGGCAATGAAAGACGGTGAGCTGGTGATATGGGATAGTGTTCACC
CTTGTTACACCGTTTTTCCATGAGCAAACTGAAACGTTTTTCATCGCTCTGGAGTGAATACCACGACGATTT
CCGGCAGTTTTCTACACATATATTTCGCAAGATGTGGCGTGTTACGGTGAAAACCTGGCCTATTTCCCTAAA
GGGTTTATTGAGATATGTTTTTTCGTCCTAGCCAATCCCTGGGTGAGTTTACCAGTTTTGATTTAAACG
TGGCCAATATGGACAACCTTCTTCGCCCCCGTTTTTACCATGGGCAAATATTATACGCAAGGCGACAAGGT
GCTGATGCCGCTGGCGATTACAGGTTTCATCATGCCGTCTGTGATGGCTTCATGTGGCAGAATGCTTAAT
GAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGGCGTAAAGATCTGGATCCGGCTTACTAAAAGCCA
GATAACAGTATGCGTATTTGCGCGCTGATTTTTTGGCGGTATAAGAATATATACTGATATGTATACCCGAAG
TATGTCAAAAAGAGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACAGCGACAGCTATCAGTTGC
TCAAGGCATATATGATGTCAATATCTCCGGTCTGGTAAGCACAACCATGCAGAATGAAGCCCGTCTGCTG
CGTGCCGAACGCTGGAAAGCGGAAAAATCAGGAAGGGATGGCTGAGGTGCGCCGTTTTATTGAAATGAACG
GCTCTTTTGTCTGACGAGAACAGGGACTGGTGAAATGCAGTTTAAAGTTTACACCTATAAAAGAGAGAGCC
```

Table 17 (continued) Nucleotide sequence of plasmid pLenti6/V5-DEST (SEQ ID NO: 105).

GTTATCGTCTGTTTGTGGATGTACAGAGTGATATTATTGACACGCCCGGGCGACGGATGGTGATCCCCCT  
GGCCAGTGCACGTCTGCTGTGATGATAAAGTCTCCCGTGAACCTTACCCGGTGGTGCATATCGGGGATGAA  
AGCTGGCGCATGATGACCACCGATATGGCCAGTGTGCCGGTCTCCGTTATCGGGGAAGAAGTGGCTGATC  
TCAGCCACCGCGAAAATGACATCAAAAACGCCATTAACCTGATGTTCTGGGGAATATAAATGTGAGGCTC  
CGTTATACACAGCCAGTCTGCAGGTGCACCATAGTGACTGGATATGTTGTGTTTTACAGTATTATGTAGT  
CTGTTTTTTATGCAAAATCTAATTTAATATATTGATATTTATATCATTTTACGTTTCTCGTTCAGCTTTC  
TTGTACAAAGTGGTTGATATCCAGCACAGTGGCGGCCGCTCGAGTCTAGAGGGCCCGCGGTTCTGAAGGTA  
AGCCTATCCCTAACCCCTCTCCTCGGTCTCGATTCTACGCGTACCGGTTAGTAATGAGTTTGGAAATTAATT  
CTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGGCAGGCAGAAGTATGCAAAAGC  
ATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGGCAGGCAGAAGTATGCAAA  
GCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCCTAACTCCGCCCCTAACTCCGCC  
CAGTTCCGCCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTTATTTATGAGAGGCCGAGGCCGCTCT  
GCCTCTGAGCTATTCCAGAAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAGCTCCCGG  
GAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACAATTAATCATCGGCATAGTATATCGGC  
ATAGTATAATACGAAGGTGAGGAACATAACCATGGCCAAGCCTTTGTCTCAAGAAGAAATCCACCTCA  
TTGAAAGAGCAACGGCTACAACTCAACAGCATCCCCATCTCTGAAGACTACAGCGTCGCGAGCGCAGCTCT  
CTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTACTGGGGACCTTGTGTCAGAACTC  
GTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAACCTGACTTGTATCGTCGCGATCGGAAATGAGA  
ACAGGGGCATCTTGAGCCCCCTGCGGACGGTGGCGACAGGTGCTTCTCGATCTGCATCCTGGGATCAAAGC  
CATAGTGAAGGACAGTGATGGACAGCCGACGGCAGTTGGGATTCTGTAATTGCTGCCCTCTGGTTATGTG  
TGGGAGGGCTAAGCACAAATTCGAGCTCGGTACCTTTAAGACCAATGACTTACAAGGCAGCTGTAGATCTT  
AGCCACTTTTTTAAAGAAAAGGGGGGACTGGAAGGGCTAATTACTCCCAACGAAGACAAGATCTGCTTT  
TTGCTTGTACTGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTGGCTAACTAGGGAACCC  
ACTGCTTAAGCCTCAATAAAGCTTGCCTTAGTGCTTCAAGTAGTGTGTGCCGCTCTGTTGTGTGACTCT  
GGTAAGTACAGATCCCTCAGACCCCTTTTAGTCTAGTGTGTGAAAATCTCTAGCAGTAGTAGTATCATGTC  
TTATTATTTCAGTATTTATAAAGTTCGAAAGAAATGAATATCAGAGAGTGAGAGGAAGTGTATTATGTCAGC  
TTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAAAGCATTTTTTTTCACTGCATTCT  
AGTTGTGGTTTGTCCAAACTCATCAATGTATCTTATCATGTCTGGCTCTAGCTATCCCGCCCCCTAACTCC  
GCCCCATCCCGCCCCCTAACTCCGCCCAGTTCGCGCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTAT  
TATGAGAGGCCGAGGCCGCTCGGCCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCC  
TAGGGACGTACCCAATTCGCCCCATAGTGAGTTCGATTAACGCGCGCTCACTGGCCGTCGTTTTTACAACGT  
CGTGACTGGGAAAACCTTGCGGTTACCCAACCTTAATCGCCTTGCGACACATCCCCCTTTCGCCAGCTGGC  
GTAATGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAATGGGACGC  
GCCCTGTAGCGGCGCATTAAGCGCGGCGGTGTGGTGTTACGCGCAGCGTGACCGCTACACTGTCCAGC  
GCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCCTTCTTCTCGCCACGTTTCGCCGCTTTTCCCGTCAAG  
CTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCCAAAAAAGTGA  
TTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCTTTGACGTTGGAGTCC  
ACGTTCTTTAATAGTGGACTCTTGTTCCAAACCTGGAACAACACTCAACCCTATCTCGGTCTATCTTTTG  
ATTTATAAGGGATTTTGCAGGATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAACGC  
GAATTTTAACAAAATATTAACGCTTACAATTTAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTA  
TTTGTATTATTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCA  
ATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTGCGCCTTATTCCCTTTTTCGCGGCA  
TTTTGCCTTCCCTGTTTTTGTCTACCCAGAAAACGCTGGTGAAAGTAAAGATGCTGAAGATCAGTTGGGTG  
CACGAGTGGGTTACATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTTCGCCCCGAAGAACG  
TTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGCAA  
GAGCAACTCGGTGCGCCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTACCCAGTCACAGAAAAGC  
ATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACCATGAGTGATAACACTGCGGC  
CAACTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCACAACATGGGGGATCAT  
GTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCACGA  
TGCCCTGTAGCAATGGCAACAACGTTGCGCAAACTATTAACTGGCGAACTACTTACTCTAGCTTCCCGGCA  
ACAATTAATAGACTGGATGGAGGCGGATAAAGTTGAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGC  
TGGTTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGGTATCATTGCAGCACTGGGGCCAG  
ATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGAGTCAGGCAACTATGGATGAACGAAATAG  
ACAGATCGCTGAGATAGGTGCCCTCACTGATTAAGCATTGGTAAGTGTGAGACCAAGTTTACTCATATATA

Table 17 (continued) Nucleotide sequence of plasmid pLenti6/V5-DEST (SEQ ID NO: 105).

CTTTAGATTGATTTAAAACTTCATTTTTTAATTTAAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCA  
TGACCAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATC  
TTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAACCACCGCTACCAGCGGTG  
GTTTGTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATAC  
CAAATACTGTTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATA  
CCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGAC  
TCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTTCGTGCACACAGCCAGCT  
TGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGA  
AGGGAGAAAGGCGGACAGGTATCCCGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCA  
GGGGGAAACGCCTGGTATCTTTATAGTCCTGTTCGGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGT  
GATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCCTGGCCTT  
TTGCTGGCCTTTTGCTCACATGTTCTTTCCCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTACCGCC  
TTTGAGTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGG  
AAGAGCGCCCAATACGCAAACCGCCTCTCCCCGCGCGTTGGCCGATTCAATTAATGCAGCTGGCACGACAG  
GTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCACCC  
CAGGCTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTGTGAGCGGATAACAATTTACACAG  
GAAACAGCTATGACCATGATTACGCCAAGCGCGCAATTAACCCTCACTAAAGGGAACAAAAGCTGGAGCT  
GCAAGCTT

Please amend Table 18 on pages 435 and 436 as follows:

Table 18: Nucleotide sequence of plasmid pLenti6/V5-D-TOPO™ (SEQ ID NO: 106).

AATGTAGTCTTATGCAATACTCTTGTAGTCTTGCAACATGGTAACGATGAGTTAGCAACATGCCTTACAA  
GGAGAGAAAAAGCACCCTGCATGCCGATTGGTGGAAGTAAGGTGGTACGATCGTGCCTTATTAGGAAGGC  
AACAGACGGGTCTGACATGGATTGGACGAACCACTGAATTGCCGCATTGCAGAGATATTGTATTTAAGTG  
CCTAGCTCGATACATAAACGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTGGCTAACTA  
GGGAACCCACTGCTTAAGCCTCAATAAAGCTTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCCCGTCTGTTGT  
GTGACTCTGGTAACTAGAGATCCCTCAGACCCCTTTTAGTCAGTGTGGAAAATCTCTAGCAGTGGCGCCCG  
AACAGGGACTTGAAAGCGAAAGGGAAACAGAGGAGCTCTCTCGACGCAGGACTCGGCTTGCTGAAGCGC  
GCACGGCAAGAGGCGAGGGGCGGCGACTGGTGAGTACGCCAAAAATTTTGACTAGCGGAGGCTAGAAGGA  
GAGAGATGGGTGCGAGAGCGTCAGTATTAAGCGGGGAGAAATTAGATCGCGATGGGAAAAAATTCGGTTA  
AGGCCAGGGGAAAGAAAAATATAAATTAATAACATATAGTATGGGCAAGCAGGGAGCTAGAACGATTTCG  
CAGTTAATCCTGGCCTGTTAGAAACATCAGAAGGCTGTAGACAAATACTGGGACAGCTACAACCATCCCT  
TCAGACAGGATCAGAAGAATTAGATCATTATATAATACAGTAGCAACCCTCTATTGTGTGCATCAAAGG  
ATAGAGATAAAAGACACCAAGGAAGCTTTAGACAAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG  
CACAGCAAGCGGCCGCTGATCTTCAGACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTGAATTAT  
ATAAATATAAAGTAGTAAAAATTGAACCATTAGGAGTAGCACCCACCAAGGCAAAGAGAAGAGTGGTGCA  
GAGAGAAAAAGAGCAGTGGGAATAGGAGCTTTGTTCTTGGGTTCTTGGGAGCAGCAGGAAGCACTATG  
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCAGAACA  
ATTTGCTGAGGGCTATTGAGGCGCAACAGCATCTGTTGCAACTCACAGTCTGGGGCATCAAGCAGCTCCA  
GGCAAGAATCCTGGCTGTGGAAAGATACCTAAAGGATCAACAGCTCCTGGGGATTGGGGTTGCTCTGGA  
AAACTCATTTGCACCACTGCTGTGCCTTGGAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTTGGA  
ATCACACGACCTGGATGGAGTGGGACAGAGAAATTAACAATTACACAAGCTTAATACACTCCTTAATTGA  
AGAATCGCAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGGAATTAGATAAATGGGCAAGTTTGTGG  
AATTGGTTTAACATAACAAATTGGCTGTGGTATATAAAATTATTCATAATGATAGTAGGAGGCTTGGTAG  
GTTTAAGAATAGTTTTTGTGTACTTTCTATAGTGAATAGAGTTAGGCAGGGATATTACCATTATCGTT  
TCAGACCCACCTCCCAACCCCGAGGGGACCCGACAGGCCCGGAAGGAATAGAAGAAGAAGGTGGAGAGAGA  
GACAGAGACAGATCCATTTCGATTAGTGAACGGATCTCGACGGTATCGATAAGCTTGGGAGTTCCGCGTTA  
CATAACTTACGTTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGAC  
GTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACT  
GCCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAAT  
GGCCCGCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATT  
AGTCATCGCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTGACTCA  
CGGGGATTTCCAAGTCTCCACCCCATTTGACGTCAATGGGAGTTTGTTTTGGCACCAAAATCAACGGGACT  
TTCCAAAATGTTCGTAACAATCCGCCCATTTGACGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTA  
TATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCAT  
AGAAGACACCGACTCTAGAGGATCCACTAGTCCAGTGTGGTGAATTGATCCCTTCACCAAGGGCTCGAG  
TCTAGAGGGCCCCGCGTTTCGAAGGTAAGCCTATCCCTAACCCCTCTCCTCGGTCTCGATTCTACGCGTACC  
GGTTAGTAATGAGTTTGGAAATTAATTCTGTGGAATGTGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTC  
CCCAGGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGG  
CTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCCTAACT  
CCGCCCATCCCCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCCGCCCATGGCTGACTAATTTTTTTTA  
TTTTATGCAGAGGCCGAGGCCGCTCTGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGG  
CCTAGGCTTTTGCAAAAAGCTCCCGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACA  
ATTAATCATCGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACTAAACCATGGCCAAGCC  
TTTGCTCTCAAGAAGAATCCACCCTCATTGAAAGAGCAACGGCTACAATCAACAGCATCCCCATCTCTGAA  
GACTACGCGTCGCCAGCGCAGCTCTCTCTAGCAGCGGCCGATCTTCACTGGTGTCAATGTATATCATT  
TTACTGGGGGACCTTGTGCAGAACTCGTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAACCTGAC  
TTGTATCGTCGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCCCTGCGGACGGTGCCGACAGGTGCTT  
CTCGATCTGCATCCTGGGATCAAAGCCATAGTGAAGGACAGTGATGGACAGCCGACGGCAGTTGGGATTC  
GTGAATTGCTGCCCTCTGGTTATGTGTGGGAGGGCTAAGCACAATTTCGAGCTCGGTACCTTTAAGACCAA  
TGACTTACAAGGCAGCTGTAGATCTTAGCCACTTTTTAAAGAAAAGGGGGAGCTGGAAGGGCTAATTCA  
CTCCCAACGAAGACAAGATCTGCTTTTTGTCTGTACTGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGG  
GAGCTCTCTGGCTAACTAGGGAACCCACTGCTTAAGCCTCAATAAAGCTTGCCCTTGAGTGCTTCAAGTAG

Table 18 (continued) Nucleotide sequence of plasmid pLenti6/V5-D-TOPO™  
(SEQ ID NO: 106).

TGTGTGCCCGTCTGTTGTGTGACTCTGGTAACTAGAGATCCCTCAGACCCTTTTAGTCAGTGTGGAAAAT  
CTCTAGCAGTAGTAGTTTCATGTCTATTATTTCAGTATTTATAACTTGCAAAGAAATGAATATCAGAG  
AGTGAGAGGAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAA  
ATAAAGCATTATTTTTCAGTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTATCATGTCTG  
GCTCTAGCTATCCCGCCCCTAACTCCGCCCATCCCGCCCCCTAACTCCGCCCAGTTCCGCCCATTTCTCCGC  
CCCATGGCTGACTAATTTTTTTTATTTATGCAGAGGCCGAGGCCGCTCGGCCCTCTGAGCTATTCCAGAA  
GTAGTGAGGAGGCTTTTTTGGAGGCCCTAGGGACGTACCCAATTCGCCCTATAGTGAGTCGTATTACGCGC  
GCTCACTGGCCGTCGTTTTACAACGTCGTGACTGGGAAAACCCCTGGCGTTACCCAACCTTAATCGCCTTGC  
AGCACATCCCCCTTTTCGCCAGCTGGCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTG  
CGCAGCCTGAATGGCGAATGGGACGCGCCCTGTAGCGGCGCATTAAGCGCGGCGGGGTGTGGTGGTTACGC  
GCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCCTTCTTTCTCGC  
CACGTTTCGCCGGCTTTCCCGCTCAAGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTA  
CGGCACCTCGACCCCAAAAACTTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGG  
TTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTTCAAACCTGGAACAACACT  
CAACCCTATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCGATTTTCGGCCTATTGGTTAAAAAAT  
GAGCTGATTTAACAATAATTTAACGCGAATTTTAACAAAATATTAAACGCTTACAATTTAGGTGGCACTTT  
TCGGGGAAATGTGCGCGGAACCCCTATTTGTTTATTTTCTAAATACATTCAAATATGTATCCGCTCATG  
AGACAATAACCCCTGATAAATGCTTCAATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTG  
TCGCCCTTATTCCCTTTTTTTCGCCGATTTTGCCCTTCTGT'TTTTGCTCACCCAGAAACGCTGGTGAAAGT  
AAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAACAGCGGTAAGATC  
CTTGAGAGTTTTTCGCCCCGAAGAACGTTTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGG  
TATTATCCCGTATTGACGCCGGGCAAGAGCAACTCGGTTCGCCGCATACACTATTCTCAGAATGACTTGGT  
TGAGTACTCACCAGTCACAGAAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCC  
ATAACCATGAGTGATAACACTGCGGCCAACCTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCG  
CTTTTTTGCACAACATGGGGGATCATGTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCAT  
ACCAACGACGAGCGTGACACACGATGCCTGTAGCAATGGCAACAACGTTGCGCAAACTATTAAAGCCAT  
GAACTACTTACTCTAGCTTCCCGGCAACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCAC  
TTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCG  
CGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGT  
CAGGCAACTATGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATTGGTAAC  
TGTCAGACCAAGTTTACTCATATATACTTTAGATTGATTTAAAACCTTCATTTTTTAATTTAAAGGATCTA  
GGTGAAGATCCTTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCA  
GACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAA  
CAAAAAAACACCGCTACACGCGGTGGTTTGT'TTTCGGGATCAAGAGCTACCAACTCTTTTTCCGAAGGT  
AACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTTCTTCTAGTGTAGCCGTAGTTAGGCCACCACCTC  
AAGAAGTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAAGTGGCTGCTGCCAGTGGCG  
ATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTGGGGCTGAAC  
GGGGGGTTCGTGCACACAGCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAG  
CTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTTCGGAA  
CAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTGGGGTTTCGCCA  
CCTCTGACTTGAGCGTCGATTTTTGTGTATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAAC  
GCGGCCTTTTTACGGTTCTTGCCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCTGCGTTATCCCCTG  
ATTCTGTGGATAACCGTATTACCGCTTTGAGTGAGCTGATACCGCTCGCCGACGCCGAACGACCGAGCG  
CAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCCAATACGCAAACCGCCTCTCCCGCGCGTTGGCCG  
ATTCATTAATGCAGCTGGCACGACAGGTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTAATG  
TGAGTTAGCTCACTCATTAGGCACCCAGGCTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAAT  
TGTGAGCGGATAACAATTTACACAGGAAACAGCTATGACCATGATTACGCCAAGCGCGCAATTAACCTT  
CACTAAAGGGAACAAAAGCTGGAGCTGCAAGCTT

Please amend Table 19 on pages 437-439 as follows:

Table 19: Nucleotide sequence of pLenti4/V5-DEST (SEQ ID NO: 107).

AATGTAGTCTTATGCAATACTCTTGTAGTCTTGCAACATGGTAACGATGAGTTAGCAACATGCCTTACAA  
GGAGAGAAAAAGCACCGTGATGCCGATTGGTGGAAGTAAGGTGGTACGATCGTGCCTTATTAGGAAGGC  
AACAGACGGGTCTGACATGGATTGGACGAACCACTGAATTGCCGCATTGCAGAGATATTGTATTTAAGTG  
CCTAGCTCGATACATAAACGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTGGCTAACTA  
GGGAACCCACTGCTTAAGCCTCAATAAAGCTTGCCCTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGT  
GTGACTCTGGTAACTAGAGATCCCTCAGACCCTTTTAGTCAGTGTGGAAAAATCTCTAGCAGTGGCGCCG  
AACAGGGACTTGAAAGCGAAAGGGAAACCAGAGGAGCTCTCTCGACGCAGGACTCGGCTTGCTGAAGCGC  
GCACGGCAAGAGGCGAGGGGCGGCGACTGGTGAGTACGCCAAAAATTTTGACTAGCGGAGGCTAGAAGGA  
GAGAGATGGGTGCGAGAGCGTCAGTATTAAGCGGGGAGAATTAGATCGCGATGGGAAAAAATTCGGTTA  
AGGCCAGGGGGAAAGAAAAAATATAAATTAAACATATAGTATGGGCAAGCAGGGAGCTAGAACGATTTCG  
CAGTTAATCCTGGCCTGTTAGAAACATCAGAAGGCTGTAGACAAATACTGGGACAGCTACAACCATCCCT  
TCAGACAGGATCAGAAGAAGCTTAGATCATTATATAATACAGTAGCAACCCCTCTATTGTGTGCATCAAAGG  
ATAGAGATAAAAGACACCAAGGAAGCTTTAGACAAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG  
CACAGCAAGCGGCCGCTGATCTTCAGACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTGAATTAT  
ATAAATATAAAGTAGTAAAAAATTGAACCATTAGGAGTAGCACCCACCAAGGCAAGAGAGAAGAGTGGTGCA  
GAGAGAAAAAAGAGCAGTGGGAATAGGAGCTTTGTTTCTTGGGTTCTTGGGAGCAGCAGGAAGCACTATG  
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCAGAACA  
ATTTGCTGAGGGCTATTGAGGCGCAACAGCATCTGTTGCAACTCACAGTCTGGGGCATCAAGCAGCTCCA  
GGCAAGAATCCTGGCTGTGGAAAGATACCTAAAGGATCAACAGCTCCTGGGGATTGGGGTTGCTCTGGA  
AAACTCATTTGCACCACTGCTGTGCCTTGGAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTTGGA  
ATCACACGACCTGGATGGAGTGGGACAGAGAAATTAACAATTACACAAGCTTAATACACTCCTTAATTGA  
AGAATCGCAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGGAATTAGATAAATGGGCAAGTTTGTGG  
AATTGGTTTAAACATAACAAATTTGGCTGTGGTATATAAATATTATCATAATGATAGTAGGAGGCTTGGTAG  
GTTTAAGAATAGTTTTCGTGTACTTTCTATAGTGAATAGAGTTAGGCAGGGATATTCACCATTATCGTT  
TCAGACCCACCTCCCAACCCCGAGGGGACCCGACAGGCCCGAAGGAATAGAAGAAGAAGGTGGAGAGAGA  
GACAGAGACAGATCCATTTCGATTAGTGAACGGATCTCGACGGTATCGATAAGCTTGGGAGTTCCGCGTTA  
CATAACTTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGAC  
GTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACT  
GCCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAAT  
GGCCCGCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCTACTTGGCAGTACATCTACGTATT  
AGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATCAATGGGCGTGATAGCGGTTTGACTCA  
CGGGGATTTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTTTTGGCACCAAAATCAACGGGACT  
TTCCAAAATGTCGTAACAACTCCGCCCATTTAGCAGCAAAATGGGCGGTAGCGGTGTACGGTGGGAGGTTCTA  
TATAAGCAGAGCTCGTTTGTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCAT  
AGAAGACACCGACTCTAGAGGATCCACTAGTCCAGTGTGGTGAATTCTGCAGATATCAACAAGTTTGTA  
CAAAAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATATTAAATTAGATTTTGCATAAAAAA  
CAGACTACATAATACTGTAAAACACAACATATCCAGTCACTATGGCGGCCGATTAGGCACCCAGGCTT  
TACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTTTGTAGTTAGGATCCGGCGAGATTTTCAGGAGCT  
AAGGAAGCTAAAATGGAGAAAAAATCACTGGATATACCACCGTTGATATATCCCAATGGCATCGTAAAG  
AACATTTTGGAGCATTTTCAGTCAGTTGCTCAATGTACCTATAACCAGACCGTTTCAGCTGGATATTACGGC  
CTTTTTAAAGACCGTAAAGAAAAAATAAGCACAAGTTTTATCCGGCCTTTATTACATTCTTGCCCGCCTG  
ATGAATGCTCATCCGGAATTCCGTATGGCAATGAAGACGGTGAGCTGGTGATATGGGATAGTGTTCACC  
CTTGTTACACCGTTTTTCCATGAGCAAACCTGAAACGTTTTTCATCGCTCTGGAGTGAATACCACGACGATTT  
CCGGCAGTTTCTACACATATATTCGCAAGATGTGGCGTGTACGGTGAACCTGGCCTATTTCCCTAAA  
GGGTTTTATTGAGAATATGTTTTTCGTCTCAGCCAATCCCTGGGTGAGTTTCACCAGTTTTGATTTAAACG  
TGGCCAATATGGACAACCTTCTTCGCCCCGTTTTTACCATGGGCAAATATTATACGCAAGGCGACAAGGT  
GCTGATGCCGCTGGCGATTTCAGGTTTCATCATGCCGTCTGTGATGGCTTCCATGTCCGCAGAATGCTTAAT  
GAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGGCGTAAAGATCTGGATCCGGCTTACTAAAAGCCA  
GATAACAGTATGCGTATTTGCGCGCTGATTTTTGCGGTATAAGAATATATACTGATATGTATACCCGAAG  
TATGTCAAAAAGAGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACAGCGACAGCTATCAGTTGC  
TCAAGGCATATATGATGTCAATATCTCCGCTCTGGTAAGCACAACCATGCAGAATGAAGCCCGTCGTCCTG  
CGTGCCGAACGCTGGAAAGCGGAAAAATCAGGAAGGGATGGCTGAGGTGCGCCCGTTTATTGAAATGAACG

Table 19 (continued) Nucleotide sequence of pLenti4/V5-DEST (SEQ ID NO: 107).

GCTCTTTTGCTGACGAGAACAGGGACTGGTGAAATGCAGTTTAAGGTTTACACCTATAAAAAGAGAGAGCC  
GTTATCGTCTGTTTGTGGATGTACAGAGTGATATTATTGACACGCCCGGGCGACGGATGGTGATCCCCCT  
GGCCAGTGCACGTCCTGCTGTGAGATAAAGTCTCCCGTGAACCTTACCCGGTGGTGATATCGGGGATGAA  
AGCTGGCGCATGATGACCACCGATATGGCCAGTGTGCCGGTCTCCGTTATCGGGGAAGAAGTGGCTGATC  
TCAGCCACCGCGAAAATGACATCAAAAACGCCATTAACCTGATGTTCTGGGGAATATAAATGTCAGGCTC  
CGTTATACACAGCCAGTCTGCAGGTTCGACCATAGTGAAGTGGATATGTTGTGTTTACAGTATTATGTAGT  
CTGTTTTTTATGCAAAATCTAATTTAATATATTGATATTTATATCATTTTACGTTTCTCGTTTCAGCTTTC  
TTGTACAAAGTGGTTGATATCCAGCACAGTGGCGGCCGCTCGAGTCTAGAGGGCCCGCGGTTCTGAAGGTA  
AGCCTATCCCTAACCTCTCCTCGGTCTCGATTCTACGCGTACCGGTTAGTAATGAGTTTGGAAATTAATT  
CTGTGGAATGTGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGGCAGGCAGGAAGTATGCAAGC  
ATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGGAAGTATGCAAA  
GCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCCTAACTCCGCCCATCCCGCCCCCTAACTCCGCC  
CAGTTCGCCCCATCTCCGCCCATGGCTGACTAATTTTTTTTATTTATGTCAGAGGCCGAGGCCGCCTCT  
GCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTCCCC  
TGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACATAACCATG  
GCCAAGTTGACCAAGTGCCGTTCCGGTGTCTCACCGCGCGCAGCTCGCCGGAGCGGTGAGTTCTGGACCG  
ACCGGCTCGGGTCTCCCGGGACTTCGTGGAGGACGACTTCGCCGGTGTGGTCCGGGACGACGTGACCCT  
GTTTCATCAGCGCGGTCCAGGACCAGGTGGTGCCGACAACACCCTGGCCTGGGTGTGGGTGCGCGGCCCTG  
GACGAGCTGTACGCCGAGTGGTTCGGAGGTCTGTCCACGAACTTCGGGACGCTCCGGGCCGGCCATGA  
CCGAGATCGGCGAGCAGCGTGGGGGCGGGAGTTCCGCCCTGCGCGACCCGCCGCAACTGCGTGCATTT  
CGTGGCCGAGGAGCAGGACTGACACGTGCTACGAGATTTAAATGGTACCTTTAAGACCAATGACTTACAA  
GGCAGCTGTAGATCTTAGCCACTTTTTTAAAGAAAAGGGGGACTGGAAGGGCTAATTCACCTCCCAACGA  
AGACAAGATCTGCTTTTTGCTTGTACTGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTG  
GCTAACTAGGGAACCCATGCTTAAGCCTCAATAAAGCTTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCCCG  
TCTTTGTGTGACTCTGTTAAGTACAGATCCCTCAGACCCCTTTAGTCAGTGTGGAATCTCTAGCAGT  
AGTAGTTCATGTCTCTTATTATTAGTATTTATAACTTGCAAAAGAAATGAATATCAGAGAGTGTAGAGGA  
ACTTGTATTATTGACGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAAAGCATT  
TTTTTCACTGCATTTCTAGTTGTGGTTTGTCCAACTCATCAATGTATCTTATCATGTCTGGCTCTAGCTA  
TCCCGCCCCCTAACTCCGCCCATCCCGCCCCCTAACTCCGCCCAGTTCCGCCCATTTCCGCCCATGGCTG  
ACTAATTTTTTTTATTTATGTCAGAGGCCGAGGCCGCTCGGCCCTGAGCTATTCCAGAAGTAGTGAGGA  
GGCTTTTTTGGAGGCCTAGGGACGTACCCAATTCGCCCTATAGTGAGTCTGATTACGCGCGCTCACTGGC  
CGTCGTTTTACAACGTCGTGACTGGGAAAACCCTGGCGTTACCCAACCTAATCGCCTTGACGACATCCC  
CCTTTCGCCAGCTGGCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGA  
ATGGCGAATGGGACGCGCCCTGTAGCGGCGCATTAAAGCGCGCGGGTGTGGTGTGTACGCGCAGCGTGAC  
CGCTACACTTGCCAGCGCCCTAGCGCCGCTCCTTTTCGCTTTCTTCCCTTCTTCTCGCCACGTTTCGCC  
GGCTTTCCCGCTCAAGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCG  
ACCCCAAAAACTTGATTAGGGTGATGGTTACGCTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCC  
TTTGACGTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAACTGGAACAACACTCAACCCTATC  
TCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCGATTTTCGCCCTATTGGTTAAAAAATGAGCTGATTT  
AACAAAAATTTAACCGCAATTTTAACAAAATATTAACGCTTACAATTTAGGTGGCACTTTTCGGGGAAAT  
GTGCGCGGAACCCCTATTGTTTTATTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAAC  
CCTGATAAATGCTTCAATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTGCCCCCTAT  
TCCCTTTTTTTCGGCATTTTGCCCTTCTGTTTTTGTCTACCCAGAAACGCTGGTGAAAGTAAAGATGCT  
GAAGATCAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTT  
TTCGCCCCGAAGAAGCTTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCG  
TATTGACGCCCGGCAAGAGCAACTCGGTGCGCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCA  
CCAGTCACAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACCATGA  
GTGATAACACTGCGGCCAATTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCA  
CAACATGGGGGATCATGTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGAC  
GAGCGTGACACCACGATGCCGTGAGCAATGGCAACAACGTTGCGCAAACTATTAACCTGGCGAACTACTTA  
CTCTAGTCTCCCGCAACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACTCTGCGCTC  
GGCCCTTCCGGCTGGCTGGTTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGTATCATT  
GCAGCACTGGGGCCAGATGGTAAGCCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGTCAGGCAACTA  
TGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATTGGTAACCTGTCAGACCA  
AGTTTACTCATATATACTTTAGATTGATTTAAACTTCATTTTTTAATTTAAAGGATCTAGGTGAAGATC

Table 19. Nucleotide sequence of pLenti4/V5-DEST (SEQ ID NO: 107).

CTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAG  
AAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAACC  
ACCGCTACCAGCGGTGGTTTGTGTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTC  
AGCAGAGCGCAGATACCAAATACTGTTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTG  
TAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAAGTGGCTGCTGCCAGTGGCGATAAGTCGTG  
TCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCG  
TGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAGCTATGAGAAA  
GCGCCACGCTTCCCGAAGGGAGAAAAGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCG  
CACGAGGGAGCTTCCAGGGGGAAAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTCGCCACCTCTGACTT  
GAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTT  
TACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGA  
TAACCGTATTACCGCCTTTGAGTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCA  
GTGAGCGAGGAAGCGGAAGAGCGCCCAATACGCAAACCGCCTCTCCCCGCGCGTTGGCCGATTCAATTAAT  
GCAGCTGGCACGACAGGTTTCCCGACTGGAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCT  
CACTCATTAGGCACCCAGGCTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTGTGAGCGGA  
TAACAATTTACACAGGAAACAGCTATGACCATGATTACGCCAAGCGCGCAATTAACCCTCACTAAAGGG  
AACAAAAGCTGGAGCTGCAAGCTT



Please amend Table 20 on pages 440- 442 as follows:

Table 20: Nucleotide sequence of pLenti6/UbC/V5-DEST (SEQ ID NO: 108).

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AATGTAGTCTTATGCAATACTCTTGTAGTCTTGCAACATGGTAACGATGAGTTAGCAACATGCCTTACAA
GGAGAGAAAAAGCACCGTGCATGCCGATTGGTGGAAGTAAGGTGGTACGATCGTGCCTTATTAGGAAGGC
AACAGACGGGTCTGACATGGATTGGACGAACCACTGAATTGCCGCATTGCAGAGATATTGTATTTAAGTG
CCTAGCTCGATACATAAACGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTGGCTAACTA
GGGAACCCACTGCTTAAGCCTCAATAAAGCTTGCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTGTG
GTGACTCTGGTAAGTAGAGATCCCTCAGACCCCTTTAGTCTAGTGTGGAAAATCTCTAGCAGTGGCGCCCG
AACAGGGACTTGAAAGCGAAAGGGAAACCCAGAGGAGCTCTCTCGACGCAGGACTCGGCTTGCTGAAGCGC
GCACGGCAAGAGGCGAGGGGCGGCGACTGGTGAGTACGCCAAAAATTTTGAAGTAGCGGAGGCTAGAAGGA
GAGAGATGGGTGCGAGAGCGTCAGTATTAAGCGGGGAGAATTAGATCGCGATGGGAAAAAATTCGGTTA
AGGCCAGGGGGAAAGAAAAAATATAAATTAAAACATATAGTATGGGCAAGCAGGGAGCTAGAACGATTCTG
CAGTTAATCCTGGCCTGTGTAGAAACATCAGAAGGCTGTAGACAAATACTGGGACAGCTACAACCATCCCT
TCAGACAGGATCAGAAGAACTTAGATCATTATATAATACAGTAGCAACCCCTCTATTGTGTGCATCAAAGG
ATAGAGATAAAAGACACCAAGGAAGCTTTAGACAAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG
CACAGCAAGCGGCCGCTGATCTTCAGACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTGAATTAT
ATAAATAAGATAGTTTTTGTCTGTACTTCTATAGTGAATAGAGTTAGGCAGGGATATTACCATTCGTT
GAGAGAAAAAAGAGCAGTGGGAATAGGAGCTTTGTTCCTTGGGTTCTTGGGAGCAGCAGGAAGCACTATG
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCAGAACA
ATTTGCTGAGGGCTATTGAGGCGCAACAGCATCTGTTGCAACTCACAGTCTGGGGCATCAAGCAGCTCCA
GGCAAGAATCCTGGCTGTGGAAAGATACCTAAAGGATCAACAGCTCCTGGGGATTTGGGGTTGCTCTGGA
AAACTCATTTGCACCACTGCTGTGCCCTTGGAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTTGGA
ATCACACGACCTGGATGGAGTGGGACAGAGAAATTAACAATTACACAAGCTTAATACACTCCTTAATTGA
AGAATCGCAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGGAATTAGATAAATGGGCAAGTTTGTGG
AATTGGTTTAACATAACAAATTGGCTGTGGTATATAAAATTATTCATAATGATAGTAGGAGGCTTGCTAG
GTTTAAGAATAGTTTTTGTCTGTACTTCTATAGTGAATAGAGTTAGGCAGGGATATTACCATTCGTT
TCAGACCCACCTCCCAACCCCGAGGGGACCCGACAGGCCCGAAGGAATAGAAGAAGAAGGTGGAGAGAGA
GACAGAGACAGATCCATTGATAGTGAACGGATCTCGACGGTATCGGATCTGGCCTCCGCGCCGGGTTT
TGGCGCCTCCCGCGGGCGCCCCCTCCTCACGGCGAGCGCTGCCACGTCAGACGAAGGGCGCAGGAGCGT
CCTGATCCTTCCGCCCCGACGCTCAGGACAGCGGCCGCTGCTCATAAGACTCGGCCTTAGAACCCAGT
ATCAGCAGAAGGACATTTTAGGACGGGACTTGGGTGACTCTAGGGCACTGGTTTTCTTTCCAGAGAGCGG
AACAGGCGAGGAAAAGTAGTCCCTTCTCGGCGATTCGCGGAGGGATCTCCGTGGGGCGGTGAACGCCGA
TGATTATATAAGGACGCGCCGGGTGTGGCACAGCTAGTTCCGTGCGAGCCGGGATTTGGGTGCGGGTTCT
TGTTTGTGATCGCTGTGATCGTCACTTGGTGTAGTAGCGGGCTGCTGGGCTGGCCGGGGCTTCTGTGGCC
GCCGGGCCGCTCGGTGGGACGGAAGCGTGTGGAGAGACCGCCAAGGGCTGTAGTCTGGGTCCGCGCAAA
GGTTGCCCTGAACTGGGGGTGGGGGGAGCGCAGCAAAATGGCGGCTGTTCCCGAGTCTTGAATGGAAGA
CGCTTGTGAGGCGGGCTGTGAGGTGTTGAAACAAGGTGGGGGGCATGGTGGGCGGCAAGAACCCAAGGT
CTTGAGGCCTTCGCTAATGCGGAAAGCTCTTATTCCGGGTGAGATGGGCTGGGGCACCATCTGGGGACCC
TGACGTGAAGTTTGTCACTGACTGGAGAATCGGTTTTGTCTGTGTTGCGGGGGCGGCAGTTATGCGGTG
CCGTTGGGCAGTGACCCCGTACCTTTGGGAGCGCGCGCCCTCGTCTGTCTGTGACGTCAACCCGTTCTGTT
GGCTTATAATGCAGGGTGGGGCCACCTGCCGGTAGGTGTGCGGTAGGCTTTTCTCCGTGCGAGGACGCGAG
GGTTCGGGCCTAGGGTAGGCTCTCCTGAATCGACAGGCGCCGACCTCTGGTGAGGGGAGGGATAAGTGA
GGCGTCAGTTTCTTTGGTCCGTTTATGTACCTATCTTCTTAAGTAGCTGAAGCTCCGGTTTGAACCTAT
GCGCTCGGGGTTGGCGAGTGTGTTTTGTGAAGTTTTTTAGGCACCTTTTGAAATGTAATCATTTGGGTCA
ATATGTAATTTTCAGTGTTAGACTAGTAAATTGTCCGCTAAATTCTGGCCGTTTTTTGGCTTTTTTTGTAG
ACGAAGCTTGGTACCGAGCTCGGATCCACTAGTCCAGTGTGGTGGAATTCTGCAGATATCAACAAGTTTG
TACAAAAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATATTAAATTAGATTTTGCATAAAA
AACAGACTACATAATACTGTAAACACACATATCCAGTCACTATGGCGGCCGATTAGGCACCCAGGC
TTTACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTTTGTAGTTAGGATCCGGCGAGATTTTCAGGAG
CTAAGGAAGCTAAAATGGAGAAAAAATCACTGGATATACCACCGTTGATATATCCCAATGGCATCGTAA
AGAACATTTTGAAGGCAATTCAGTCAGTTGCTCAATGTACCTATAACCAGACCGTTAGCTGGATATTACG
GCCTTTTTTAAGACCGTAAAGAAAAAATAAGTAAATTTATCCGGCCTTTATTCACATTCTTGCCCGCC
TGATGAATGCTCATCCGGAATTCCGTATGGCAATGAAAGACGGTGAGCTGGTGATATGGGATAGTGTTC
CCCTTGTTACACCGTTTTCCATGAGCAAACCTGAAACGTTTTTCATCGCTCTGGAGTGAATACCACGACGAT
TTCCGGCAGTTTCTACACATATATTCGCAAGATGTGGCGTGTACGGTGAAAACCTGGCCTATTTCCCTA
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Table 20 (continued) Nucleotide sequence of pLenti6/UbC/V5-DEST (SEQ ID NO: 108).

AAGGGTTTATTGAGAATATGTTTTTCGTCTCAGCCAATCCCTGGGTGAGTTTACCAGTTTTGATTTAAA  
CGTGGCCAATATGGACAACCTTCTCGCCCCCGTTTTACCAGTGGGCAAATATTATACGCAAGGCGACAAG  
GTGCTGATGCCGCTGGCGATTACAGTTTCATCATGCCGTCGTGATGGCTTCCATGTCGGCAGAATGCTTA  
ATGAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGGCGTAAAGATCTGGATCCGGCTTACTAAAAGC  
CAGATAACAGTATGCGTATTTGCGCGCTGATTTTTGCGGTATAAGAATATATACTGATATGTATACCCGA  
AGTATGTCAAAAAGAGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACAGCGACAGCTATCAGTT  
GCTCAAGGCATATATGATGTCAATATCTCCGGTCTGGTAAGCACAACCATGCAGAATGAAGCCCGTCGTC  
TGCGTGCCGAACGCTGGAAAGCGGAAAATCAGGAAGGGATGGCTGAGGTCGCCCGGTTATTGAAATGAA  
CGGCTCTTTTGCTGACGAGAAACAGGGACTGGTGAAATGCAGTTTAAGGTTTACACCTATAAAAGAGAGAG  
CCGTTATCGTCTGTTTGTGGATGTACAGAGTGATATTATTGACACGCCCGGGCGACGGATGGTGATCCCC  
CTGGCCAGTGACGCTGCTGTGTCAGATAAAGTCTCCCGTGAACCTTACCCTGGTGGTGATATCGGGGATG  
AAAGCTGGCGCATGATGACCACCGATATGGCCAGTGTGCCGGTCTCCGTTATCGGGGAAGAAGTGCGCTGA  
TCTCAGCCACCGCGAAAATGACATCAAAAACGCCATTAACCTGATGTTCTGGGGAATATAAATGTGAGGC  
TCCGTTATACACAGCCAGTCTGCAGGTCGACCATAGTGACTGGATATGTTGTGTTTTACAGTATTATGTA  
GTCTGTTTTTTATGCAAAATCTAATTTAATATATTGATATTATATCATTTTACGTTTCTCGTTACAGCTT  
TCTTGTAAGAGTGGTTGATATCCAGCACAGTGGCGGCCGTCGAGTCTAGAGGGCCCGCGGTTCAAGG  
TAAGCCTATCCCTAACCTCTCCCTCGGTCCTCGATTCTACGCGTACCGGTTAGTAATGAGTTTGAATTA  
TTCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGGCAGGCAGAAAGTATGCAAA  
GCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCA  
AAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCCTAACTCCGCCCATCCCCCCCCCTAACTCCG  
CCCAGTTCCGCCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTTATTTATGCAGAGGCCGAGGCCGCCCT  
CTGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAGCTCCC  
GGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACAATTAATCATCGGCATAGTATATCG  
GCATAGTATAATACGACAAGGTGAGGAACATAACCATGGCCAAGCCTTTGTCTCAAGAAGAATCCACCTT  
CATTGTAAGAGCAACGGCTACAATCAACAGCATCCCCATCTCTGAAGACTACAGCGTCGCCAGCGCAGCT  
CTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTCTTACTGGGGGACCTTGTGTCAGAAC  
TCGTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAACCTGACTTGTATCGTCGCGATCGGAAATGA  
GAACAGGGGCATCTTGAGCCCCCTGCGGACGGTGCCGACAGGTGCTTCTCGATCTGCATCCTGGGATCAAA  
GCCATAGTGAAGGACAGTGATGGACAGCCGACGGCAGTTGGGATTCTGTAATTGCTGCCCTCTGGTTATG  
TGTGGGAGGGCTAAGCACAATTCGAGCTCGGTACCTTTAAGACCAATGACTTACAAGGCAGCTGTAGATC  
TTAGCCACTTTTTTAAAAAGAAAAGGGGGGACTGGAAGGGCTAATTAAGTCCCAACGAAGACAAGATCTGCT  
TTTTGCTTGTACTGGGTCTCTCTGGTTAGACCAGATCTGAGCCTGGGAGCTCTCTGGCTAACTAGGGAAC  
CCACTGCTTAAGCCTCAATAAAGCTTGCCTTAGTGCTTCAAGTAGTGTGTGCCGCTCTGTTGTGTGACT  
CTGGTAACATAGAGATCCCTCAGACCTTTTAGTCTAGTGTGGAATCTCTAGCAGTAGTAGTTCATGTCAT  
TCTTATTATTAGTATTATTATAACTTGCAAAAGAAATGAATATCAGAGAGTGAGAGGAACCTGTTTATTGCA  
GCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAAAGCATTTTTTTTTACTGTCATT  
CTAGTTGTGGTTTGTCCAACTCATCAATGTATCTTATCATGTCTGGCTCTAGCTATCCCGCCCCCTAACT  
CCGCCCCATCCCGCCCCCTAACTCCGCCCCAGTTCGCCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTA  
TTTATGCAGAGGCCGAGGCCGCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGG  
CCTAGGGACGTACCCAATTCCGCCCTATAGTGAGTTCGATTACGCGCGCTCACTGGCCGCTCGTTTTTACAAC  
GTCGTGACTGGGAAAACCTTGCGGTTACCCAACCTTAATCGCCTTGACGACATCCCCCTTTCCGCCAGCTG  
GCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCTGAATGGCGAATGGGAC  
GCGCCCTGTAGCGGCGCATTAAGCGCGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCA  
GCGCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCCTTCTTTCTCGCCACGTTTCGCCGGCTTTCCCCGTCA  
AGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCCAAAAAATTT  
GATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCTTTGACGTTGGAGT  
CCACGTTCTTTAATAGTGGACTCTTGTTCAAACTGGAACAACACTCAACCTATCTCGGTCTATTCTTT  
TGATTTATAAGGGATTTTGCCGATTTTCGGCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAAC  
GCGAATTTTAAACAAAAATTAACGCTTACAATTTAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCC  
TATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCTGATAAATGCTT  
CAATAATATTGAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTGCGCCTTATTCCTTTTTTTCGGG  
CATTTTGCCTTCTGTTTTTGTGCTACCCAGAAACGCTGGTGAAAGTAAAGATGCTGAAGATCAGTTGGG  
TGCACGAGTGGGTTACATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTTCGCCCCGAAGAA  
CGTTTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGC  
AAGAGCAACTCGGTCGCCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTACCAGTCACAGAAAA

Table 20 (continued) Nucleotide sequence of pLenti6/UbC/V5-DEST (SEQ ID NO: 108).

GCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACCATGAGTGATAACACTGCG  
GCCAACTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCACAACATGGGGGATC  
ATGTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCAC  
GATGCCTGTAGCAATGGCAACAACGTTGCGCAAACCTATTAACCTGGCGAACTACTTACTCTAGCTTCCCGG  
CAACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACCTTCTGCGCTCGGCCCTTCCGGCTG  
GCTGGTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGCGGTCTCGCGGTATCATTGCAGCACTGGGGCC  
AGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAAT  
AGACAGATCGCTGAGATAGGTGCCCTCACTGATTAAGCATTTGGTAACTGTCAGACCAAGTTTACTCATATA  
TACTTTAGATTGATTTAAAACTTCATTTTTTAATTTAAAGGATCTAGGTGAAGATCCTTTTTTGATAATCT  
CATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGA  
TCTTCTTGAGATCCTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAACCACCGCTACCAGCGG  
TGGTTTGTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGAT  
ACCAAATACTGTTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACA  
TACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGG  
ACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCTGGGCTGAACGGGGGGTTTCGTGCACACAGCCAG  
CTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCC  
GAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTC  
CAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTGCGGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTT  
GTGATGCTCGTCAGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCCTGGCC  
TTTTGCTGGCCTTTTGCTCACATGTTCTTTCCCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTACCG  
CCTTTGAGTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGC  
GGAAGAGCGCCCAATACGCAAAACCGCCTCTCCCCGCGCGTTGGCCGATTTCATTAATGCAGCTGGCACCAC  
AGGTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCAC  
CCCAGGCTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTGTGAGCGGATAACAATTTACAC  
AGGAAACAGCTATGACCATGATTACGCCAAGCGCGCAATTAACCCTCACTAAAGGGAACAAAAGCTGGAG  
CTGCAAGCTT

Please amend Table 21 on pages 443-445 as follows:

Table 21: Nucleotide sequence of plasmid pLP1 (SEQ ID NO: 109).

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TTGGCCCATTCATACGTTGTATCCATATCATAATATGTACATTTATATTGGCTCATGTCCAACATTACC
GCCATGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCA
TATATGGAGTTCCGCGTTACATAAATTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCGCC
CATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGT
GGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATT
GACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCCTACTT
GGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGTATGCGGTTTTGGCAGTACATCAATGGGCG
TGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGG
CACCAAAATCAACGGGACTTTCCAATATGTCGTAACAATCCGCCCCATTGACGCAATGGGCGGTAGGC
GTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCC
ACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCCCTCGAAGCTTACATGTGGTACC
GAGCTCGGATCCTGAGAACTTCAGGGTGAGTCTATGGGACCCTTGATGTTTTCTTTCCCCTTCTTTTCTA
TGGTTAAGTTCATGTATAGGAAGGGGAGAAGTAACAGGGTACACATATTGACCAAATCAGGGTAATTTT
GCATTTGTAATTTTAAAAATGCTTCTTCTTTTAAATATACTTTTTTGTATCTTATTTCTAATACTTT
CCCTAATCTCTTTCTTTCAGGGCAATAATGATACAATGTATCATGCCTCTTTCGACCATTTCTAAAGAATA
ACAGTGATAATTTCTGGGTAAAGGCAATAGCAATATTTCTGCATATAAATATTTCTGCATATAAATTTGTA
ACTGATGTAAGAGGTTTCATATTGCTAATAGCAGCTACAATCCAGCTACCATTCTGCTTTTATTTTATGG
TTGGGATAAGGCTGGATTATTCTGAGTCCAAGCTAGGCCCTTTTGCTAATCATGTTTCATACCTCTTATCT
TCCTCCACAGCTCCTGGGCAACGTGCTGGTCTGTGTGCTGGCCCATCACTTTGGCAAAGCACGTGAGAT
CTGAATTCGAGATCTGCCGCCGCCATGGGTGCGAGAGCGTCAGTATTAAGCGGGGGAGAATTAGATCGAT
GGGAAAAAATTCGGTTAAGGCCAGGGGGAAAGAAAAAATATAAATTAAAACATATAGTATGGGCAAGCAG
GGAGCTAGAACGATTTCGAGTTAATCCTGGCCTGTTAGAAACATCAGAAGGCTGTAGACAAATACTGGGA
CAGCTACAACCATCCCTTCAGACAGGATCAGAAGAATTAGATCATTATATAATACAGTAGCAACCTCTT
ATTGTGTGCATCAAAGGATAGAGATAAAAGACACCAAGGAAGCTTTAGACAAGATAGAGGAAGAGCAAAA
CAAAAGTAAGAAAAAGCACAGCAAGCAGCAGCTGACACAGGACACAGCAATCAGGTGAGCCAAAATTA
CCTATAGTGCAGAACATCCAGGGGCAATGGTACATCAGGCCATATCACCTAGAACTTTAAATGCATGGG
TAAAGTAGTAGAAGAGAAGGCTTTCAGCCGAGAAGTGATACCCATGTTTTTCAGCATTATCAGAAGGAGC
CACCCCAAGATTTAAACACCATGCTAAACACAGTGGGGGGACATCAAGCAGCCATGCAAAATGTTAAAA
GAGACCATCAATGAGGAAGCTGCAGAAATGGGATAGAGTGCATCCAGTGCATGCAGGGCCTATTGCACCAG
GCCAGATGAGAGAACCAAGGGGAAGTGACATAGCAGGAATACTAGTACCCTTCAGGAACAAATAGGATG
GATGACACATAATCCACCTATCCCAGTAGGAGAAATCTATAAAAGATGGATAATCCTGGGATTAAATAAA
ATAGTAAGAATGTATAGCCCTACCAGCATTCTGGACATAAGACAAGGACCAAGGAACCTTTAGAGACT
ATGTAGACCGATTCTATAAACTCTAAGAGCCGAGCAAGCTTCACAAGAGGTAAAAAATTGGATGACAGA
AACCTTGTTGGTCCAAAATGCGAACCCAGATTGTAAGACTATTTTAAAGCATTGGGACCAGGAGCGACA
CTAGAAGAAATGATGACAGCATGTGAGGGAGTGGGGGGACCCGGCCATAAAGCAAGAGTTTTGGCTGAAG
CAATGAGCCAAGTAACAAATCCAGCTACCATAATGATACAGAAAGGCAATTTTAGGAACCAAAAGAAAGAC
TGTTAAGTGTTCATTTGTGGCAAAGAAGGGCACATAGCCAAAATTTGCAGGGCCCCCTAGGAAAAAGGGC
TGTTGGAATGTGGAAAGGAAGGACACCAATGAAAGATTGTACTGAGAGACAGGCTAATTTTTTAGGGA
AGATCTGGCCTTCCCAAGGAAGGCCAGGGAATTTCTTCAGAGCAGACCAGAGCCAACAGCCCCACC
AGAAGAGAGCTTCAGGTTTGGGGAAGAGACAACAACCTCCTCAGAAAGCAGGAGCCGATAGACAAGGAA
CTGTATCCTTTAGCTTCCCTCAGATCACTCTTGGCAGCGACCCCTCGTCACAATAAAGATAGGGGGGCA
ATTAAAGGAAGCTCTATTAGATACAGGAGCAGATGATACAGTATTAGAAGAAATGAATTTGCCAGGAAGA
TGGAAACCAAAAATGATAGGGGGAATTGGAGGTTTTATCAAAGTAAGACAGTATGATCAGATACTCATAG
AAATCTGCGGACATAAAGCTATAGGTACAGTATTAGTAGGACCTACACCTGTCAACATAATTGGAAGAAA
TCTGTTGACTCAGATTGGCTGCCTTTAAATTTTCCATTAGTCTATTGAGACTGTACCAGTAAATTA
AAGCCAGGAATGGATGGCCCCAAAAGTTAAACAATGGCCATTGACAGAAGAAAAAATAAAGCATTAGTAG
AAATTTGTACAGAAATGGAAAAGGAAGGAAAAATTTCAAAAATTGGGCCTGAAAATCCATACAATACTCC
AGTATTTGCCATAAAGAAAAAAGACAGTACTAAATGGAGAAAATTAGTAGATTTTCAGAGAACTTAATAAG
AGAACTCAAGATTTCTGGGAAGTTCAATTAGGAATACCACATCCTGCAGGGTTAAACAGAAAAAATCAG
TAACAGTACTGGATGTGGGCGATGCATATTTTCAGTTCCCTTAGATAAAGACTTCAGGAAGTATACTGC
ATTTACCATACCTAGTATAAAACAATGAGACACCAGGGATTAGATATCAGTACAATGTGCTTCCACAGGGA
TGGAAAGGATCACCAGCAATATTCAGTGTAGCATGACAAAAATCTTAGAGCCTTTTAGAAAAACAAAATC
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Table 21 (continued) Nucleotide sequence of plasmid pLP1 (SEQ ID NO: 109).

CAGACATAGTCATCTATCAATACATGGATGATTTGTATGTAGGATCTGACTTAGAAATAGGGCAGCATAG  
AACAAAAATAGAGGAAGTGAACAAACATCTGTTGAGGTGGGGATTTACCACACCAGACAAAAACATCAG  
AAAGAACCTCCATTCTTTGGATGGGTATGAACTCCATCCTGATAAATGGACAGTACAGCCTATAGTGC  
TGCCAGAAAAGGACAGCTGGACTGTCAATGACATACAGAAATTAGTGGGAAAATTGAATTGGGCAAGTCA  
GATTTATGCAGGGATTAAAGTAAGGCAATTATGTAAACTTCTTAGGGGAACCAAAGCACTAACAGAAGTA  
GTACCACTAACAGAAGAAGCAGAGCTAGAACTGGCAGAAAACAGGGAGATTCTAAAAGAACCGGTACATG  
GAGTGTATTATGACCCATCAAAAGACTTAATAGCAGAAATACAGAAGCAGGGGCAAGGCCAATGGACATA  
TCAAATTTATCAAGAGCCATTTAAAAATCTGAAAACAGGAAAGTATGCAAGAATGAAGGGTGCCCACT  
AATGATGTGAAAACAATTAACAGAGGCAGTACAAAAAATAGCCACAGAAAGCATAGTAATATGGGGAAAAGA  
CTCCTAAATTTAAATTACCCATACAAAAGGAAACATGGGAAGCATGGTGGACAGAGTATTGGCAAGCCAC  
CTGGATTCTGAGTGGGAGTTTGTCAATACCCCTCCCTTAGTGAAGTTATGGTACCAGTTAGAGAAAGAA  
CCCATAATAGGAGCAGAACTTCTATGTAGATGGGGCAGCCAATAGGGAACTAAATTAGGAAAAGCAG  
GATATGTAAGTACAGAGGAAGACAAAAAGTTGTCCCCCTAACGGACACAACAAATCAGAAGACTGAGTT  
ACAAGCAATTCTAGCTTTGCAGGATTCGGGATTAGAAGTAAACATAGTGACAGACTCACAATATGCA  
TTGGGAATCATTCAAGCACAACCAGATAAGAGTGAATCAGAGTTAGTCAGTCAAATAATAGAGCAGTTAA  
TAAAAAAGGAAAAGTCTACCTGGCATGGGTACCAGCACACAAGGAATTGGAGGAAATGAACAAGTAGA  
TAAATTGGTCAGTGTCTGGAATCAGGAAAGTACTATTTTATAGATGGAATAGATAAGGCCCAAGAAGAACAT  
GAGAAATATCACAGTAATTGGAGAGCAATGGCTAGTGATTTTAACTACCACCTGTAGTAGCAAAAAGAAA  
TAGTAGCCAGCTGTGATAAATGTCAGCTAAAAGGGGAAGCCATGCATGGACAAGTAGACTGTAGCCAGG  
AATATGGCAGCTAGATTGTACACATTTAGAAGGAAAAGTTATCTTGGTAGCAGTTTATGTAGCCAGTGGA  
TATATAGAAGCAGAAGTAATTCAGCAGAGACAGGGCAAGAAACAGCATACTTCCTCTTAAATTAGCAG  
GAAGATGGCCAGTAAAAACAGTACATACAGACAATGGCAGCAATTTACCAGTACTACAGTTAAGGCCGC  
CTGTTGGTGGGCGGGGATCAAGCAGGAATTTGGCATTCCTTACAATCCCCAAAGTCAAGGAGTAATAGAA  
TCTATGAATAAAGAATTAAAGAAAAATTATAGGACAGGTAAGAGATCAGGCTGAACATCTTAAGACAGCAG  
TACAAATGGCAGTATTCTCCACAATTTTAAAGAAAAGGGGGGATTGGGGGGTACAGTGCAGGGGAAAG  
AATAGTAGACATAATAGCAACAGACATACAACTAAAGAATTACAAAAACAATTACAAAAATTCAAAAAT  
TTTCGGGTTTATTACAGGGACAGCAGAGATCCAGTTTGGAAAGGACCAGCAAAGCTCCTCTGGAAAGGTG  
AAGGGGCAGTAGTAATACAAGATAATAGTGACATAAAAGTAGTGCCAAGAAGAAAAGCAAAGATCATCAG  
GGATTATGGAACACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAACACATGGAA  
TTCCGGAGCGGCCGAGGAGCTTGTTCCTTGGGTTCTTGGGAGCAGCAGGAAGCACTATGGGCGCAGCG  
TCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGACAGCAGCAGAACAATTTGCTGA  
GGGCTATTGAGGCGCAACAGCATCTGTTGCACTCACAGTCTGGGGCATCAAGCAGCTCCAGGCAAGAAT  
CCTGGCTGTGGAAGATACCTAAAGGATCAACAGCTCCTGGGGATTGGGGTTGCTCTGGAATACTCATT  
TGCACCATGCTGCTGCTTGAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTGGAAATCACACGA  
CCTGGATGAGTGGGACAGAGAAATTAACAATTACACAAGCTTCCGCGGAATTCACCCCAAGTGCAGG  
CTGCCTATCAGAAAGTGGTGGCTGGTGTGGCTAATGCCCTGGCCCAAGTATCCTAAGCTCGCTTTCT  
TGCTGTCCAATTTCTATTAAAGGTTCCCTTGTTCCTAAGTCCAATACTAACTGGGGGATATTATGAA  
GGGCCTTGAGCATCTGGATTCTGCCTAATAAAAAACATTTATTTTCATTGCAATGATGTATTAAATTAT  
TTCTGAATATTTTACTAAAAAGGGAAATGTGGGAGGTGAGTGCATTTAAACATAAAGAAATGAAGAGCTA  
GTTCAAACCTTGGGAAAAATACACTATATCTTAACTCCATGAAAGAAGGTGAGGCTGCAACAGCTAATG  
CACATTGGCAACAGCCCTGATGCCTATGCCCTTATTCATCCCTCAGAAAAGGATTCAAGTAGAGGCTTGA  
TTTGGAGGTTAAAGTTTGTCTATGCTGTATTTTACATTACTTATTGTTTTAGCTGTCTCATGAATGTCT  
TTTCACTACCCATTTGCTTATCCTGCATCTCTCAGCCTTGACTCCACTCAGTTCTCTTGTCTTAGAGATAC  
CACCTTTCCCTGAAAGTGTTCCTTCCATGTTTTACGGCGAGATGGTTTTCTCCTCGCCTGGCCACTCAGCC  
TTAGTTGTCTCTGTTGTCTTATAGAGGTCTACTTGAAGAAGGAAAAACAGGGGGCATGGTTTACTGTCC  
TGTGAGCCCTTCTTCCCTGCCTCCCCCACTCACAGTGACCCGGAATCCCTCGACATGGCAGTCTAGCACT  
AGTGCAGCCGAGATCTGCTTCCCTCGCTCACTGACTCGCTCGCTCGGTCTCGGCTGCGGCGAGCGGT  
ATCAGCTCACTCAAAGGCGGTAAACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGA  
GCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCC  
CCCCTGACGAGCATCAAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATA  
CCAGCGGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCGCTTACCGGATACCTG  
TCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCCGTTGT  
AGGTCTGTTCTGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCCAGCCGACCGCTGCGCTTATCCGG  
TAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGG  
ATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCTAACTACGGCTACACTA

Table 21 (continued) Nucleotide sequence of plasmid pLP1 (SEQ ID NO: 109).

GAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTG  
ATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAA  
AAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACACGTT  
AAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAAGTTT  
TAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCT  
ATCTCAGCGATCTGTCTATTTCTGTTTCATCCATAGTTGCCTGACTCCCCGTCTGTGTAGATAACTACGATAC  
GGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTT  
ATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATC  
CAGTCTATTAATTGTTGCCCCGGAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAGTTTGCGCAACGTTGTTG  
CCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTTGGTATGGCTTCATTACAGCTCCGGTTCCCAACG  
ATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATCGTT  
GTCAGAAGTAAGTTGGCCGAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCA  
TGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGATGCG  
GCGACCGAGTTGCTCTTGCCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAAGTG  
CTCATCATTGGAAAACGTTCTTCGGGGCGAAAACCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCTGA  
TGTAACCCACTCGTGACCCCACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAA  
AACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTC  
CTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTT  
AGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGGGATCCCTGAGG  
GGGCCCCCATGGGCTAGAGGATCCGGCCTCGGCCTCTGCATAAATAAAAAAATTAGTCAGCCATGAGC

Please amend Table 22 on pages 446 and 447 as follows:

Table 22: Nucleotide sequence of plasmid pLP2 (SEQ ID NO: 110).

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AATGTAGTCTTATGCAATACTCTTGTAGTCTTGCAACATGGTAACGATGAGTTAGCAACATGCCTTACAA
GGAGAGAAAAAGCACCGTGATGCCGATTGGTGGAAGTAAGGTGGTACGATCGTGCCTTATTAGGAAGGC
AACAGACGGGTCTGACATGGATTGGACGAACCACTGAATTCCGCATTGCAGAGATATTGTATTAAAGTGC
CTAGCTCGATACAATAAACGCCATTTGACCATTACACCATTTGGTGTGCACCTCCAAGCTCGAGCTCGTT
TAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTGGACCTCCATAGAAGACACCGGGACCG
ATCCAGCCTCCCCCTCGAAGCTAGTCGATTAGGCATCTCCTATGGCAGGAAGAAGCGGAGACAGCGACGAA
GACCTCCTCAAGGCAGTCAGACTCATCAAGTTTCTCTATCAAAGCAACCCACCTCCCAATCCCGAGGGGA
CCCGACAGGCCCGAAGGAATAGAAGAAGAAGGTGGAGAGAGAGACAGAGACAGATCCATTCGATTAGTGA
ACGGATCCTTAGCACTTATCTGGGACGATCTGCGGAGCCTGTGCCTCTTCAGCTACCACCGCTTGAGAGA
CTTACTCTTGATTGTAACGAGGATTGTGGAACCTTCTGGGACGCAGGGGGTGGGAAGCCCTCAAATATTGG
TGGAATCTCCTACAATATTGGAGTCAGGAGCTAAAGAATAGTGCTGTTAGCTTGCTCAATGCCACAGCTA
TAGCAGTAGCTGAGGGGACAGATAGGGTTATAGAAGTAGTACAAGAAGCTTGGCACTGGCCGTCGTTTTA
CAACGTCGTGATCTGAGCCTGGGAGATCTCTGGCTAACTAGGGAACCCACTGCTTAAGCCTCAATAAAGC
TTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCGCTCTGTTGTGACTCTGCTAACTAGAGATCAGGAAAAAC
CCTGGCGTTACCCAACCTTAATCGCCTTGACAGCACATCCCCCTTTCGCCAGCTGGCGTAATAGCGAAGAGG
CCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAATGGCGCCTGATGCGGTATTTTCT
CCTTACGCATCTGTGCGGTATTTACACCGCATACGTCAAAGCAACCATAGTACGCGCCCTGTAGCGGCG
CATTAAAGCGCGGCGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGC
TCCTTTTCGCTTTCTTCCCTTCTTCTCGCCACGTTTCGCCGGCTTTCCTCGTCAAGCTCTAAATCGGGGG
CTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCCAAAAAACTTGATTTGGGTGATGGTT
CACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAG
TGGACTCTTGTTCCAACTGGAACAACACTCAACCCTATCTCGGGCTATTCTTTTGATTTATAAGGGATT
TTGCCGATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAAACAAAAATTAACGCGAATTTTAACAAA
TATTAACGTTTACAATTTTATGGTGCACCTCTCAGTACAATCTGCTCTGATGCGCGATAGTTAAGCGAGCC
CCGACACCCGCCAACACCCGCTGACGCGCCCTGACGGGCTTGTCTGCTCCCGGCATCCGCTTACAGACAA
GCTGTGACCGTCTCCGGGAGCTGCATGTGTGACAGGTTTTTACCCTCATCACCGAAACGCGCGAGACGAA
AGGGCCTCGTGATACGCCATTTTTTATAGGTTAATGTGATGATAATAATGGTTTCTTAGACGTCAGGTGG
CACTTTTTCGGGGAATGTGCGCGGAACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCG
CTCATGAGACAATAACCTGATAAATGCTTCAATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATT
TCCGTGTGCGCCCTATTCCCTTTTTTGCGGCATTTTGCCTTCTGTTTTTTGCTCACCCAGAAACGCTGGT
GAAAGTAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAACAGCGGT
AAGATCCTTGAGAGTTTTCGCCCCGAAGAAGCTTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTG
GCGCGGTATTATCCGCTATTGACGCGGGGCAAGAGCAACTCGGTCGCCGCATACACTATTCTCAGAAATGA
CTTGTTTGGTACTCACCAGTCACAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAATG
GCTGCCATAACCATGAGTGATAACACTGCGGCCAATTACTTCTGACAACGATCGGAGGACCGAAGGAGC
TAACCGCTTTTTTGCACAACATGGGGGATCATGTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGA
AGCCATACCAAACGACGAGCGTGACACCACGATGCCTGTAGCAATGGCAACAACGTTGCGCAAACCTATTA
ACTGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAG
GACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTTATTGCTGATAAATCTGGAGCCGCTGAGCGTGG
GTCTCGCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACG
GGGAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATT
GGTAAGTGTGACAGCAAGTTTACTCATATATACTTTAGATTGATTTAAAACTTCATTTTTTAATTTAAAG
GATCTAGGTGAAGATCCTTTTGTATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCATGA
GCGTCAGACCCCGTAGAAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTCTGCGCGTAATCTGCTGCT
TGCAAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTGTTGCCGGATCAAGAGCTACCAACTCTTTTTCC
GAAGGTAAGTGGCTTACGACAGAGCGCAGATACCAAAATACTGTTCTTCTAGTGATAGCCGTAGTTAGGCCAC
CACTTCAAGAACTCTGTAGCACCAGCTACATACCTCGCTCTGCTAATCCTGTTACCACTGGCTGCTGCCA
GTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGTCCGGG
CTGAACGGGGGGTTCGTGCACACAGCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAG
CGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGG
TCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGAAACGCCTGGTATCTTTATAGTCTGTGCGGTT
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Table 22 (continued) Nucleotide sequence of plasmid pLP2 (SEQ ID NO: 110).

TCGCCACCTCTGACTTGAGCGTCGATTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCC  
AGCAACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTAT  
CCCCTGATTCTGTGGATAACCGTATTACCGCCTTTGAGTGAGCTGATACCGCTCGCCGCAGCCGAACGAC  
CGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCCAATACGCAAACCGCCTCTCCCCGCGCGT  
TGGCCGATTCATTAATGCAGCTGGCACGACAGGTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAA  
TTAATGTGAGTTAGCTCACTCATTAGGCACCCCAGGCTTTACACTTTATGCTTCCGGCTCGTATGTTGTG  
TGGAATTGTGAGCGGATAACAATTCACACAGGAAACAGCTATGACATGATTACGAATTCGATGTACGGG  
CCAGATATACGCGTATCTGAGGGGACTAGGGTGTGTTTAGGCGAAAAGCGGGGCTTCGGTTGTACGCGGT  
TAGGAGTCCCCTCAGGATATAGTAGTTTCGCTTTTGCATAGGGAGGGGA



Please amend Table 23 on pages 448 and 449 as follows:

Table 23: Nucleotide sequence of plasmid pLP/VSVG (SEQ ID NO: 111).

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TTGGCCCATTTGCATACGTTGTATCCATATCATAATATGTACATTTATATTGGCTCATGTCCAACATTACC
GCCATGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTTCATTAGTTCATAGCCCA
TATATGGAGTTCCGCGTTACATAACTTACGGTAAATGGCCCCGCTGGCTGACCGCCCAACGACCCCCGCC
CATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGT
GGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATT
GACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCCTACTT
GGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCG
TGGATAGCGGTTTGACTCACGGGGATTTCGAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTGGG
CACCAAAATCAACGGGACTTTCCAAAATGTGTAACAACCTCCGCCCCATTGACGCAAATGGGCGGTAGGC
GTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCC
ACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCCCTCGAAGCTTACATGTGGTACC
GAGCTCGGATCCTGAGAACTTCAGGGTGAGTCTATGGGACCCTTGATGTTTTCTTTCCCTTCTTTTCTA
TGGTTAAGTTCATGTCATAGGAAGGGGAGAAGTAACAGGGTACACATATTGACCAAATCAGGGTAATTTT
GCATTTGTAATTTTAAAAATGCTTTCTTCTTTTAATATACTTTTTTGTGTTTATCTTATTTCTAATACTTT
CCCTAATCTCTTTCTTTTCAGGGCAATAATGATACAAATGATCATGCTCTTTTGCACCACTTCTAAAGAATA
ACAGTGATAATTTCTGGGTTAAGGCAATAGCAATATTTCTGCATATAAAATATTTCTGCATATAAAATTGTA
ACTGATGTAAGAGGTTTCATATTGCTAATAGCAGCTACAATCCAGCTACCATTCTGCTTTTATTTTATGG
TTGGGATAAGGCTGGATTATTCTGAGTCCAAGCTAGGCCCTTTTGCTAATCATGTTTCATACCTCTTATCT
TCCTCCACAGCTCCTGGGCAACGTGCTGGTCTGTGTGCTGGCCCATCACTTTGGCAAAGCACGTGAGAT
CTGAATTTCTGACACTATGAAGTGCCTTTTGTACTTAGCCTTTTATTCATTGGGGTGAATTGCAAGTTCA
CCATAGTTTTTCCACACAACCAAAAAGGAAACTGGAAAAATGTTCTTCTAATTACCATTATTGCCCGTC
AAGCTCAGATTTAAATTGGCATAATGACTTAATAGGCACAGCCTTACAAGTCAAAATGCCCAAGAGTCAC
AAGGCTATTCAAGCAGACGGTTGGATGTGTCATGCTTCCAAATGGGTCACTACTTGTGATTTCCGCTGGT
ATGGACCGAAGTATATAACACATTCCATCCGATCCTTCACTCCATCTGTAGAACAATGCAAGGAAAGCAT
TGAACAAACGAAACAAAGGAACCTGGCTGAATCCAGGCTTCCCTCCTCAAAGTTGTGGATATGCAACTGTG
ACGGATGCCGAAGCAGTGATTGTCCAGGTGACTCCTCACCATGTGCTGGTTGATGAATACACAGGAGAAT
GGGTTGATTACAGTTCATCAACGGAATGCAGCAATTACATATGCCCCACTGTCCATAACTCTACAAC
CTGGCATTCTGACTATAAGGTCAAAGGGCTATGTGATTCTAACCTCATTCCATGGACATCACCTTCTTC
TCAGAGGACGGAGAGCTATCATCCCTGGGAAAGGAGGGCACAGGGTTCAGAAGTAATACTTTTGCTTATG
AAACTGGAGGCAAGGCCTGCAAAATGCAATACTGCAAGCATTGGGGAGTCAGACTCCCATCAGGTGTCTG
GTTTCGAGATGGCTGATAAGGATCTCTTTGCTGCAGCCAGATTCCCTGAATGCCAGAAGGGTCAAGTATC
TCTGCTCCATCTCAGACCTCAGTGGATGTAAGTCTAATTCAGGACGTTGAGAGGATCTTGATTATTCCC
TCTGCCAAGAACTCGAGCAAAATCAGAGCGGGTCTTCAATCTCTCCAGTGGATCTCAGTATCTTGC
TCCTAAAAACCCAGGAACCGTCTGCTTTTCAACCATTAATGATGGTACCCTAAAAATACTTTGAGACAGA
TACATCAGAGTCGATATTGCTGCTCCAATCCTCTCAAGAATGGTCGGAATGATCAGTGGAATACCACAG
AAAGGGAATGTGGGATGACTGGGCACCATATGAAGACGTGGAAATTTGGACCCAATGGAGTTCTGAGGAC
CAGTTCAGGATATAAGTTTCTTTTATACATGATTGGACATGGTATGTTGGACTCCGATCTTCATCTTAGC
TCAAAGGCTCAGGTGTTTGAACATCCTCATTCAAGACGCTGCTTCGCAACTTCTTGATGATGAGAGTT
TATTTTTTGGTGATACTGGGCTATCCAAAATCCAATCGAGCTTGTAGAAGGTTGGTTTCAGTAGTTGGAA
AAGCTCTATTGCCTCTTTTTCTTTATCATAGGGTTAATCATTGGACTATTCTTGGTTCTCCGAGTTGGT
ATCCATCTTTGCATTAAATTAAAGCACACCAAGAAAAGACAGATTTATACAGACATAGAGATGAACCGAC
TTGGAAGTAAGTCAAAATCCTGCACAACAGATTCTTCATGTTTGGACCAATCAACTTGTGATACCATGC
TCAAAGAGGCTCAATTATATTTGAGTTTTTAATTTTTTGAAGAAAAAAGGAAATCAAGGAAATCAAGG
CACCAGTGCAGGCTGCCTATCAGAAAGTGGTGGCTGGTGTGGCTAATGCCCTGGGCCACAAGTATCACTA
AGCTCGCTTTCTTGCTGTCCAATTTCTATTAAAGGTTCTTTGTTCCCTAAGTCCAATACTAACTGGG
GGATATTATGAAGGGCCTTGAGCATCTGGATTCTGCCTAATAAAAAACATTTATTTTTCATTGCAATGATG
TATTTAAATTATTTCTGAATATTTTACTAAAAAGGGAATGTGGGAGGTGAGTGCATTTAAACATAAAGA
AATGAAGAGCTAGTTCAAACCTTGGGAAATACACTATATCTTAAACTCCATGAAAGAAGGTGAGGCTGC
AAACAGCTAATGCACATTGGCAACAGCCCCTGATGCCTATGCCTTATTCATCCCTCAGAAAAGGATTCAA
GTAGAGGCTTGATTTGGAGGTTAAAGTTTTGCTATGCTGTATTTTACATTACTTATTGTTTTAGCTGTCC
TCATGAATGTCTTTTCACTACCCATTGCTTATCCTGCATCTCTCAGCCTTGACTCCACTCAGTTCTCTT
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Table 23 (continued) Nucleotide sequence of plasmid pLP/VSVG  
(SEQ ID NO: 111).

GCTTAGAGATACCACCTTTCCCTGAAGTGTTCCCTCCATGTTTTACGGCGAGATGGTTTCTCCTCGCCT  
GGCCACTCAGCCTTAGTTGTCTCTGTTGTCTTATAGAGGTCTACTTGAAGAAGGAAAAACAGGGGGCATG  
GTTTGACTGTCTGTGAGCCCTTCTTCCCTGCCTCCCCACTCACAGTGACCCGGAATCCCTCGACATGG  
CAGTCTAGCACTAGTGCGGCCGCAGATCTGCTTCCCTCGCTCACTGACTCGCTGCGCTCGGTTCGGCT  
GCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGA  
AAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCC  
ATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGG  
ACTATAAAGATACCAGGCGTTTCCCTTGGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTT  
ACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATC  
TCAGTTCGGTGTAGGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTTCAGCCCGACCGCTG  
CGCCTTATCCGGTAAGTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCC  
ACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACT  
ACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGT  
TGGTAGCTCTTGATCCGGCAAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATT  
ACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACG  
AAAACCTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTA  
AAAATGAAGTTTAAATCAATCTAAAGTATATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATC  
AGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCTGTAGA  
TAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATAACCGCGAGACCCACGCTCACC  
GGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTA  
TCCGCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTTCGCCAGTTAATAGTTTGC  
GCAACGTTGTTGCCATGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTTCATTCAGCTC  
CGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGT  
CCTCCGATCGTTGTGCAAGTAAGTTGGCCGAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATT  
CTCTTACTGTGATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGA  
ATAGTGATGCGGCGACCGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGCGCCACATAGCAGA  
ACTTTAAAAGTGCTCATCATTTGGAACCGTTCTTCGGGGCGAAACTCTCAAGGATCTTACCGCTGTTGA  
GATCCAGTTCGATGTAACCCACTCGTGACCCAACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTC  
TGGGTGAGCAAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATA  
CTCATACTCTTCTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATAT  
TTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGG  
GATCCCCCTGAGGGGGCCCCCATGGGCTAGAGGATCCGGCCTCGGCCTCTGCATAAAATAAAAAAATTAGT  
CAGCCATGAGC

Please amend Table 28 on pages 450 and 451 as follows:

Table 28: Nucleotide sequence of plasmid pcDNA<sup>TM</sup>6.2/V5-DEST (SEQ ID NO: 112).

GACGGATCGGGAGATCTCCCGATCCCCTATGGTGCACCTCTCAGTACAATCTGCTCTGATGCCGCATAGTT  
AAGCCAGTATCTGCTCCCTGCTTGTGTGTTGGAGGTGCGTGAGTAGTGCGCGAGCAAAATTTAAGCTACA  
ACAAGGCAAGGCTTGACCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGCTTCGCG  
ATGTACGGGCCAGATATACGCGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTC  
ATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAACTTACGGTAAATGGCCCGCTGGCTGACCG  
CCCAACGACCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCC  
ATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCC  
AAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCCAGTACATGACCTTA  
TGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGC  
AGTACATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCGAAGTCTCCACCCCATTGACGTCAA  
TGGGAGTTTTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTCCGCCCATTTGACG  
CAAATGGGCGGTAGGCGGTGACGGTGGGAGGTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCA  
CTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAGGGAGACCCAAGCTGGCTAGTTAAGCTATCA  
ACAAGTTTGTACAAAAAGCTGAACGAGAAACGTAAATATGATATAAATATCAATATATTAAATTAGATTT  
TGCATAAAAAACAGACTACATAAATACTGTAAACACACATATCCAGTCACTATGAATCAACTACTTAGA  
TGGTATTAGTGACCTGTAGTTCGACCGACAGCCTTCCAAATGTTCTTCGGGTGATGCTGCCAACTTAGTCG  
ACCGACAGCCTTCCAAATGTTCTTCTCAAACGGAATCGTCGTATCCAGCCTACTCGCTATTGTCCTCAAT  
GCCGTATTAATCATAAAAAGAAATAAGAAAAAGAGGTGCGAGCCTCTTTTTTGTGTGACAAAATAAAAA  
CATCTACCTATTCATATACGCTAGTGTATAGTCTGAAAATCATCTGCATCAAGAACAATTTTCAAACT  
CTTATACTTTTCTCTTACAAGTCGTTCCGGCTTCATCTGGATTTTCAGCCTCTATACTTACTAAACGTGAT  
AAAGTTTCTGTAATTTCTACTGTATCGACCTGCAGACTGGCTGTGTATAAGGGAGCCTGACATTTATATT  
CCCCAGAACATCAGGTTAATGGCGTTTTTGTATGTCATTTTCGCGGTGGCTGAGATCAGCCACTTCTTCCC  
CGATAACGGAGACCCGACACTGGCCATATCGGTGGTCATCATGCGCCAGCTTTCATCCCCGATATGCAC  
CACCGGGTAAAGTTACGCGGAGACTTTATCTGACAGCAGACGTGCAGTGGCCAGGGGGATCACCATTCCGT  
CGCCCGGGCGTGTCAATAATATCACTCTGTACATCCACAAACAGACGATAACGGCTCTCTCTTTTATAGG  
TGTAACCTTAAACTGCATTTACCAGTCCCTGTTCTCGTCAGCAAAAAGAGCCGTTCAATTTCAATAAACC  
GGGCGACCTCAGCCATCCCTTCCCTGATTTTCCGCTTTCCAGCGTTCGGCACGCAGACGACGGGCTTCATT  
CTGCATGGTTGTGCTTACCAGACCGGAGATATTGACATCATATATGCCTTGAGCAACTGATAGCTGTGCG  
TGTCAACTGTCACTGTAATACGCTGCTTCATAGCACACCTCTTTTTGACATACTTCGGGTATACATATCA  
GTATATATTCTTATACCGCAAAAATCAGCGCGCAAAATACGCATACTGTTATCTGGCTTTTAGTAAGCCGG  
ATCCACGCGATTACGCCCCGCCCTGCCACTCATCGCAGTACTGTTGTAATTCATTAAGCATTCCTGCCGAC  
ATGAAGCCATCACAGACGGCATGATGAACCTGAATCGCCAGCGGCATCAGCACCTTGTGCGCTTGCGTA  
TAATATTTGCCCCATGGTGAACACGGGGCGAAGAAGTTTCCATATTGGCCACGTTTAAATCAAAACTGG  
TGAAACTCACCCAGGATTTGGCTGAGACGAAACATATTCTCAATAAAACCTTTAGGGAAATAGGCCAG  
GTTTTACCGTAACACGCCACATCTTGCGAATATATGTGTAGAAACTGCCGGAATCGTCGTGGTATTCA  
CTCCAGAGCGATGAAAACGTTTTCAGTTTGCTCATGGAAAACGGTGTAACAAGGGTGAACACTATCCATA  
TCACCAGCTCACCGTCTTTCATTGCCATACGGAATTCGGATGAGCATTCATCAGGCGGGCAAGAATGTG  
AATAAAGGCCGGATAAAACTTGTGCTTATTTTTCTTTACGGTCTTTAAAAAGGCCGTAATATCCAGCTGA  
ACGGTCTGGTTATAGGTACATTGAGCAACTGACTGAAATGCCTCAAAATGTTCTTTACGATGCCATTGGG  
ATATATCAACGGTGGTATATCCAGTGATTTTTTTCTCCATTTTAGCTTCCTTAGCTCCTGAAAATCTCGA  
TAACTCAAAAAATACGCCCGGTAGTGATCTTATTTTCATTATGGTGAAAGTTGGAACCTCTTACGTGCCGA  
TCAACGTCTCATTTTCGCCAAAAGTTGGCCAGGGCTTCCCGGTATCAACAGGGACACCAGGATTTATTT  
ATTCTGCGAAGTGATCTTCCGTCACAGGTATTTATTCGGCGCAAGTGCGTCGGGTGATGTTGTTTTACAG  
AGTCGACTACAGGTCACTAATACCATCTAAGTAGTTGATTATAGTGACTGGATATGTTGTGTTTTACAG  
TATTATGTAGTCTGTTTTTTATGCAAAATCTAATTTAATATATTGATATTTATATCATTTTACGTTTCTC  
GTTACGCTTTCTGTACAAAGTGTTGATCTAGAGGGCCCGCGGTTTGAAGGTAAGCCTATCCCTAACCC  
TCTCCTCGGTCTCGATTCTACGCGTACCGGTTAGTAATGAGTTTAAACGGGGGAGGCTAACTGAAACACG  
GAAGGAGACAATACCGGAAGGAACCCGCGCTATGACGGCAATAAAAAGACAGAATAAAACGCACGGGTGT  
TGGGTGCTTTGTTTCATAAACGCGGGGTTCCGGTCCCAGGGCTGGCACTCTGTGATACCCACCGAGACCC  
CATTTGGGGCCAATACGCCCGGCTTCTTCCTTTTCCCCACCCCAAGTTCGGGTGAAGGCCAG  
GGCTCGCAGCCAACGTGCGGGCGGCAGGCCCTGCCATAGCAGATCTGCGCAGCTGGGGCTCTAGGGGTA

Table 28 (continued) Nucleotide sequence of plasmid pcDNA™6.2/V5-DEST  
(SEQ ID NO: 112).

TCCCCACGCGCCCTGTAGCGGCGCATTAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACA  
CTTGCCAGCGCCCTAGCGCCCGCTCCTTTCGCTTTCCTTCCCTTCTTCGCCACGTTCCGCCGGCTTTC  
CCCGTCAAGCTCTAAATCGGGGCATCCCTTTAGGGTTCGGATTTAGTGCTTTACGGCACCTCGACCCCAA  
AAACTTGGATTAGGGTGTAGGTTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCTTTGACG  
TTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAACTGGAACAACACTCAACCCTATCTCGGTCT  
ATTCTTTTGATTATAAGGGATTTTGGGGATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAAACAAAA  
ATTTAACGCGAATTAATTCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAGTCCCCAGGCTCCCCAGCAG  
GCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAGTCCCCAGGCTCCCCAGC  
AGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAGTCCCCAGGCTCCCCAGC  
CCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCGCCCCATGGCTGACTAATTTTTTTTTATTTATGCAG  
AGGCCGAGGCCCGCTCTGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTT  
TTGCAAAAAGCTCCCGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACAATTAATCAT  
CGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACATAACCATGGCCAAGCCTTTGTCTCA  
AGAAGAATCCACCCTCATTGAAAGAGCAACGGCTACAATCAACAGCATCCCCATCTCTGAAGACTACAGC  
GTCGCCAGCGCAGCTCTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTACTGGGG  
GACCTTGTGCAGAACTCGTGGTGTCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAACCTGACTTGTATCGT  
CGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCCGCGGACGGTGCCGACAGGTGCTTCTCGATCTG  
CATCTTGGGATCAAAGCCATAGTGAAGGACAGTGATGGACAGCCGACGGCAGTTGGGATTCTGTGAATTGC  
TGCCCTCTGGTTATGTGTGGGAGGGCTAAGCACTTCGTGGCCGAGGAGCAGGACTGACACGTGCTACGAG  
ATTTTCGATTCCACCGCCCGCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTTCCGGGACGCCGGCTGGAT  
GATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCACCCCAACTTGTTTTATTGCAGCTTATAAT  
GGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAAAGCATTTTTTTTCACTGCATTCTAGTTGTG  
GTTTGTCCAACTCATCAATGTATCTTATCATGTCTGTATACCGTCGACCTCTAGCTAGAGCTTGGCGTA  
ATCATGGTCATAGCTGTTTCTGTGTGAAATTGTTATCCGCTCACAAATCCACACAACATACGAGCCGGA  
AGCATAAAGTGTAAGCACTGGGGTGCCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGC  
CCGCTTTTCAGTCCGGAAACCTGTCTGCGGACGCTGCAATTAATGAATCGGCCAACGCGCGGGAGAGCGG  
TTTGCGTATTGGGCGCTCTTCCGCTTCTCTCGTCACTGACTCGCTGCGCTCGGTCTGCTTCCGCTCGGCGA  
GCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACA  
TGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCT.  
CCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAA  
AGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGCTTACCGGAT  
ACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTC  
GGTGTAGGTGCTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCAGCCCGACCGCTGCGCCTTA  
TCCGGTAACACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTA  
ACAGGATTAGCAGAGGATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGCTACGCTA  
CACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAGAGAGTTGGTAGC  
TCTTGATCCGGCAAAACAAACCACCGCTGGTAGCGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAA  
AAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACG  
TTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAATAATGAAGT  
TTTAAATCAATCTAAAGTATATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCAC  
CTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGAT  
ACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCAGGCTCCAGAT  
TTATCAGCAATAAACCAGCCGAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTTCAACTTTATCCGCCTCCA  
TCCAGTCTATTAATTGTTGCGGGGAAGCTAGAGTAAGTAGTTTCGCCAGTTAATAGTTTTCGCAACGTTGT  
TGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTTCATTACGCTCCGGTTCCCAA  
CGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTTCCGATCG  
TTGTGAGAAGTAAGTTGGCCGAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGT  
CATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGATG  
CGGCGACCGAGTTGCTCTTGGCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAG  
TGCTCATCATTGAAAACGTTCTTTCGGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTC  
GATGTAAACCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCA  
AAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT  
TCCTTTTTCAATATTATGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTAT  
TTAGAAAAATAAACAATAAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTC

Please amend Table 29 on pages 452 and 453 as follows:

Table 29: Nucleotide sequence of plasmid pcDNA™6.2/GFP-DEST (SEQ ID NO: 113).

GACGGATCGGGAGATCTCCCGATCCCTATGGTGCACCTCTCAGTACAATCTGCTCTGATGCCGCATAGTT  
AAGCCAGTATCTGCTCCCTGCTTGTGTGTTGGAGGTGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACA  
ACAAGGCAAGGCTTGACCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGCTTCGCG  
ATGTACGGGCCAGATATACGCGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTC  
ATTAGTTCATAGCCCATATATGGAGTTCGCGGTTACATAACTTACGGTAAATGGCCCGCTGGCTGACCG  
CCCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCC  
ATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCC  
AATGACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCCAGTACATGACCTTA  
TGGGACTTTCTTACTTGGCAGTACATCTACGTATTAGTTCATCGCTATTACCATGGTGTATGCGGTTTTGGC  
AGTACATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAA  
TGGGAGTTTGTGTTTGGCACCAAAATCAACGGGACTTTCCAAATGTGCGTAACAACCTCCGCCCATTGACG  
CAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCA  
CTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAGGGAGACCCAAGCTGGCTAGTTAAGCTATCA  
ACAAGTTTGTACAAAAAGCTGAACGAGAAACGTAAAATGATATAAAATATCAATATATTAAATTAGATTT  
TGCATAAAAAACAGACTACATAACTGTAAAACACAACATATCCAGTCACTATGAATCAACTACTTAGA  
TGGTATTAGTGACCTGTAGTCGACCGACAGCCTTCCAAATGTTCTTCGGGTGATGCTGCCAAGCTTAGTCG  
ACCGACAGCCTTCCAAATGTTCTTCTCAAACGGAATCGTCGTATCCAGCCTACTCGCTATTGTCTCTCAAT  
GCCGTATTAAATCATAAAAAGAAATAAGAAAAAGAGGTGCGAGCCTCTTTTTTGTGTGACAAAAATAAAAA  
CATCTACCTATTTCATATACGCTAGTGTATAGTCTCTGAAAATCATCTGCATCAAGAACAATTTTCAAACT  
CTTATACTTTTCTCTTACAAGTCGTTCCGGCTTCATCTGGATTTTTCAGCCTCTATACTTACTAAACGTGAT  
AAAGTTTCTGTAATTTCTACTGTATCGACCTGCAGACTGGCTGTGTATAAGGGAGCCTGACATTTTATATT  
CCCCAGAACATCAGGTTAATGGCGTTTTTGTATGTCATTTTCGCGGTGGCTGAGATCAGCCACTTCTTCCC  
CGATAACGGGAGACCGGCACACTGGCCATATCGGTGGTCATCATGCGCCAGCTTTCATCCCCGATATGCAC  
CACCGGGTAAAGTTACCGGGAGACTTATCTGACAGCAGACGTGCACTGGCCAGGGGGATCACCATCCGT  
CGCCCCGGGCGTGTCAATAATATCACTCTGTACATCCACAAACAGACGATAACGGCTCTCTCTTTTATAGG  
TGTAACCTTAAACTGCATTTTACCAGTCCCTGTTCTCGTCAGCAAAAGAGCCGTTTCAATTAATAACC  
GGGCGACCTCAGCCATCCCTTCCTGATTTTCCGCTTTCCAGCGTTCCGACGCGCAGACGACGGGCTTCATT  
CTGCATGGTTGTGCTTACCAGACCGGAGATATTGACATCATATATGCCTTGAGCAACTGATAGCTGTCTGC  
TGTAACCTGTCACTGTAATACGCTGCTTCATAGCACACCTCTTTTTGACATACTTCGGGTATACATATCA  
GTATATATTCTTATACCGCAAAAATCAGCGCGCAAAATACGCATACTGTTATCTGGCTTTTGTAGTAAAGCCG  
ATCCACGCGATTACGCCCCGCCCTGCCACTCATCGCAGTACTGTTGTAATTCATTAAGCATTCTGCCGAC  
ATGGAAGCCATCACAGACGGCATGATGAACCTGAATCGCCAGCGGCATCAGCACCTTGTGCGCTTGCCTA  
TAATATTTGCCCATGGTGAAAACGGGGGCGAAGAAGTTGTCCATATTGGCCACGTTTAAATCAAACTGG  
TGAAACTCACCCAGGGATTGGCTGAGACGAAAAACATATTCTCAATAAACCTTTAGGGAAATAGGCCAG  
GTTTTACCGTAACACGCCACATCTTGCGAATATATGTGTAGAACTGCCGGAAATCGTCGTGGTATTCA  
CTCCAGAGCGATGAAAACGTTTCAGTTTGCTCATGGAAAACGGTGTAACAAGGGTGAACTATCCCATAT  
TCACCAGCTCACCGTCTTTTCAATTGCCATACGGAATTCGGGATGAGCATTTCATCAGGCGGGCAAGAATGTG  
AATAAAGGCCGGATAAAAACTTGTGCTTATTTTTCTTTACGGTCTTTAAAAAGGCCGTAATATCCAGCTGA  
ACGGTCTGGTTATAGGTACATTGAGCAACTGACTGAAATGCCTCAAAATGTTCTTTACGATGCCATTGGG  
ATATATCAACGGTGGTATATCCAGTGATTTTTTTCTCCATTTTAGCTTCTTAGCTCCTGAAAATCTCGA  
TAACTCAAAAAATACGCCCGGTAGTGATCTTATTTTCAATTATGGTGAAAGTTGGAACCTCTTACGTGCCGA  
TCAACGTCTCATTTTCGCCAAAAGTTGGCCCAGGGCTTCCCGGTATCAACAGGGACACCAGGATTTATTT  
ATTCTGCGAAGTGATCTTCCGTCACAGGTATTTATTCGGCGCAAAGTGCGTCCGGTGATGCTGCCAAGTT  
AGTCGACTACAGGTCACTAATACCATCTAAGTAGTTGATTTCATAGTACTGATATGTTGTGTTTTACAG  
TATTATGTAAGTCTGTTTTTATGCAAAATCTAATTTAATATATTGATATTATATCATTTTACGTTTTCTC  
GTTTACGTTTTCTGTACAAAGTGTTGATCTAGAGGCCCCGCGCTAGCAAAAGGAGAGAAGAACTTTTCAC  
TGGAGTTGTCCCAATTCTTGTGTAATTAGATGGTGATGTTAATGGGCACAAATTTTCTGTCTAGTGGAGAG  
GGTGAAGGTGATGCTACATACGGAAAGCTTACCCTTAAATTTATTTGCACTACTGGAAAACCTACCTGTTTC  
CATGGCCAACACTTGTCACTACTTTCTCTTATGGTGTTCATGCTTTTCCCGTTATCCGGATCATATGAA  
ACGGCATGACTTTTTTCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAACGCACTATATCTTTCAAAGAT  
GACGGGAACATAAGACGCGTGCTGAAGTCAAGTTTGAAGGTGATACCTTGTTAATCGTATCGAGTTAA  
AAGGTATTGATTTTAAAGAAGATGGAACATTCTCGGACACAACTCGAGTACAACCTATAACTCACACAA

Table 29 (continued) Nucleotide sequence of plasmid pcDNA<sup>TM</sup>6.2/GFP-DEST  
(SEQ ID NO: 113).

TGTATACATCACGGCAGACAAACAAAAGAATGGAATCAAAGCTAACTTCAAATTCGTCACAACATTGAA  
GATGGATCCGTTCAACTAGCAGACCATTATCAACAAAATACTCCAATTGGCGATGGCCCTGTCTTTTAC  
CAGACAACCATTACCTGTGACACAATCTGCCCTTTCGAAAGATCCCAACGAAAAGCGTGACCACATGGT  
CCTTCTTGAGTTTGTAAGTGTCTGGGATTACACATGGCATGGATGAATAGTAATGAGTCCACGTTTAA  
ACGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAACCCGCGCTATGACGGCAATAAAA  
AGACAGAATAAAACGCACGGGTGTTGGGTCTGTTTGTTCATAAACCGGGGTTTCGGTCCCAGGGCTGGCAC  
TCTGTCGATACCCACCGAGACCCCATTTGGGGCCAATACGCCCGCGTTTCTTCTTTTCCCCACCCACCC  
CCCCAAGTTTCGGGTGAAGGCCAGGGCTCGCAGCCCAACGTCGGGGCGGCAGGCCCTGCCATAGCAGATCT  
GCGCAGCTGGGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGCGGCGCATTAAGCGCGGCGGGTGTGGTG  
GTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCCTTCCT  
TTCTCGCCACGTTTCGCGGGCTTTCCCCGTCAAGCTCTAAATCGGGGCATCCCTTTAGGGTTCGGATTTAG  
TGCTTTACGGCACCTCGACCCCCAAAAAATTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGA  
TAGACGGTTTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAA  
CAACACTCAACCCTATCTCGGTCTATCTTTTGTATTATAAGGGATTTTGGGGATTTTCGGCCTATTGGTT  
AAAAATGAGCTGATTTTAAACAAAATTTAACGCGAATTAATCTGTGGAATGTGTGTAGTTAGGGTGTG  
GAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTG  
TGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATA  
GTCCCGCCCTAACTCCGCCCATCCCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCGCCCCATGGCT  
GACTAATTTTTTTTATTTATGACAGAGCCGAGGCCGCTCTGCCTCTGAGCTATTCCAGAAGTAGTGAGG  
AGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTCCCGGGAGCTTGTATATCCATTTTCGGATCTGAT  
CAGCACGTGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACATA  
AACCATGGCCAAGCCTTTGTCTCAAGAAGAATCCACCCTCATTAAGAGCAACGGCTACAATCAACAGC  
ATCCCCATCTCTGAAGACTACAGCGTCGCCAGCGCAGCTCTCTCTAGCGACGGCCGCATCTTCACTGGTG  
TCAATGTATATCATTTTACTGGGGGACCTTGTGCGAAGTCTGTTGGTGTGGGCACTGCTGCTGCTGCGG  
AGCTGGCAACCTGACTTGATCGTTCGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCTGCGGACGG  
TGCCGACAGGTGCTTCTCGATCTGCATCCTGGGATCAAAGCCATAGTGAAGGACAGTGATGGACAGCCGA  
CGGCAGTTGGGATTCTGTAATTGCTGCCCTCTGGTTATGTGTGGGAGGGCTAAGCACTTCGTGGCCGAGG  
AGCAGGACTGACACGTGCTACGAGATTCGATTCCACCGCCGCTTCTATGAAAGGTTGGGCTTCGGAAT  
CGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCCCCC  
AACTTGTATTATTGACGCTTATAATGTTTACAAATAAAGCAATAGCATCACAATTTTCAAAATAAAGCAT  
TTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTATCATGTCTGTATACCGTC  
GACCTCTAGCTAGAGCTTGGCGTAATCATGGTCATAGCTGTTTCTGTGTGAAATTGTTATCCGCTCACA  
ATTTCCACACAACATCAGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCCTAATGAGTGAGCTAACTCA  
CATTAAATTGCGTTGCGCTCACTGCCGCTTTTCCAGTCCGGGAAACCTGTCTGCGCAGCTGCATTAATGA  
CGGCCAACGCGCGGGGAGAGGCGGTTTGCCTATTGGGCGCTCTTCCGCTTCTCTGCTCACTGACTCGCTG  
CGCTCGGTCTGTTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAAT  
CAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGC  
GTTGCTGGCGTTTTTTCATAGGCTCCGCCCCCTGACGAGCATCACAATAATCGACGCTCAAGTCAGAGG  
TGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTG  
TTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCCTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAG  
CTCACGCTGTAGGTATCTCAGTTTCGGTGTAGGTTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCC  
GTTACGCCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGCTAAGACACGACTTAT  
CGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTT  
GAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTT  
ACCTTCGGAAGAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTTTTTTTGT  
GCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGA  
CGCTCAGTGGAAACGAAAACCTACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTACCTAG  
ATCCTTTTAAATTAATAATGAAGTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTT  
ACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACT  
CCCCGCTGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGA  
GACCCAGCTCACC GGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGAAGGGCCGAGCGCAGAAGTG  
GTCCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTTGTTGCCGGAAGCTAGAGTAAGTAGTTTCGCC  
AGTTAATAGTTTGC GCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATG

Table 29 (continued) Nucleotide sequence of plasmid pcDNA<sup>TM</sup>6.2/GFP-DEST  
(SEQ ID NO: 113).

GCTTCATTTCAGCTCCGGTTCCTCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAAGCGG  
TTAGCTCCTTCGGTCCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGGC  
AGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACC  
AAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCG  
CGCCACATAGCAGAACTTTAAAAAGTGCTCATCATTTGGAACCGTTCTTCGGGGCGAAACTCTCAAGGAT  
CTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACT  
TTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACAC  
GGAAATGTTGAATACTCATACTCTTCCTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCAT  
GAGCGGATACATATTTGAATGTATTTAGAAAAATAACAATAGGGGTTCCGCGCACATTTCCCCGAAAA  
GTGCCACCTGACGTC

Table 30: Amino acid sequence of a polypeptide having  $\beta$ -lactamase activity (SEQ ID NO: 114).

[illegible]



Please amend Table 31 on pages 455 and 456 as follows:

Table 31: Nucleotide sequence of pLenti4TO/V5-DEST (SEQ ID NO: 115).

aatgtagtcttatgcaatactctttagtagtcttgcaacatggtaacgatgagttagcaacatgccttacaaggagaga  
aaaagcaccgtgcatgccgattgggtggaagtaagggtggtagcatcgctgccttattaggaaggcaacagacgggtctg  
acatggattggacgaaccactgaattgccgcattgcagagatatgtatttaagtgcctagctcgatacataaacgg  
gtctctctgggttagaccagatctgagcctgggagctctctggctaactaggggaaccactgcttaagcctcaataaa  
gcttgcccttagtgcttcaagtagtggtgcccgtctgttggtgtagctctggtaactagagatccctcagacccttt  
tagtcagtgtggaaaatctctagcagtggcgcccgaacagggacttgaaagcgaaagggaaaccagaggagctctct  
cgacgcaggactcggcttgctgaagcgcgcacggcaagaggcgagggcgagctgggtgagtacgccaaaaatttt  
gactagcggaggctagaaggagagagatgggtgcgagagcgtcagatttaagcgggggagaattagatcgcgatggg  
aaaaaattcgggttaaggccaggggggaaagaaaaatataaattaaaacatatagtaggggaagcaggggagctagaa  
cgattcgcagttaatcctggcctgttagaaaacatcagaaggctgtagacaaaactgggacagctacaaccatccct  
tcagacaggatcagaagaacttagatcattatataatacagtagcaaccctctattgtgtgcatcaaaggatagaga  
taaaagacaccaaggaagctttagacaagatagaggaagagcaaaacaaaagtaagaccaccgcacagcaagcggcc  
gctgatcttcagacctggaggaggagatatgagggaacattggagaagtgaattatataaataaaagtagtaaaaa  
ttgaaccattaggagtagcacccaccaaggcaagagaagagtggtgcagagagaaaaaagagcagtggggaatagga  
gctttgttccctgggttcttgggagcagcaggaagcactatggcgcgagcgtcaatgacgctgacggtacaggccag  
acaattattgtctggtatagtgacgagcagaacaatttgcctgagggctattgaggcgcaacagcatctgttgcaac  
tcacagctctggggcatcaagcagctccaggcaagaatcctggctgtggaaagatacctaaaggatcaacagctcctg  
gggatttgggggttgcctctggaaaactcatttgcaccactgctgtgccttgggaatgctagttggagtaataaatctct  
ggaacagatttgggaatcacacgacctggatggagtgggacagagaaaattaacaattacacaagcttaatacactcct  
taattgaagaatcgcaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagtttgtgg  
aattgggttaacataacaaattggctgtggtatataaaattattcataatgatagtaggaggcttggtagggttaag  
aatagtttttgcctgactttctatagtgaatagagttaggcagggatattcaccattatcgtttcagacccacctcc  
caaccccgaggggaccccgacaggcccgaaggaatagaagaagaaggtggagagagagacagagacagatccattcga  
ttagtgaacggatctcgacgggtatcgataagcttgggagttccgcgttacataacttacggtaaatggcccgcctgg  
ctgacgcgcccaacgacccccgccttgcagctcaataatgacgtatgttcccatagtaacgcctaagggaactttcc  
attgacgtcaatgggtggagtatttacggtaaactgcccacttggcagtagcatcaagtgtatcatatgccaaagtacg  
ccccctattgacgtcaatgacggtaaatggcccgcctggcattatgccagtagcatgaccttatgggactttcctac  
ttggcagtagcatctacgtattagtcacgtctattaccatgggtgatgcggttttggcagtagcatcaatgggcgtggat  
agcgggttgactcacggggatttccaagctccaccccatgacgtcaatgggagtttgttttggcaccaaaatcaa  
cgggactttccaaaatgtcgtaacaaactccgcccattgacgcaaatgggcggtaggcgtgtacggtgggaggtcta  
tataagcagagctctccctatcagtgatagagatctccctatcagtgatagagatcgctcgactagtccagtggtg  
gaattctgcagatatcaacaagtttgtacaaaaaagctgaacgagaaaacgtaaaatgatataaatatcaatatatta  
aattagattttgcataaaaaaacagactacataactgtataaacacacatatccagtcactatggcgggccgcatta  
ggcaccgccaggtcttacactttatgcttccggtcgtataatgtgtggattttgagttaggtccggcgagattttc  
aggagctaagggaagctaaaatgggagaaaaaatcactggatataaccacggttgatatatcccaatggcatcgtaaag  
aacatttttagggcatttcagtcagttgctcaatgtacctataaccagaccgttcagctggatattacggccttttta  
aagaccgtaaaagaaaaataagcacaaagttttatccggcctttattcacattcttgcccgcctgatgaatgctcatcc  
ggaattccgtatggcaatgaaagacggtgagctggtgatatgggatagtggtcacccttggttacaccggttttccatg  
agcaaaactgaaacggttttcatcgctctggagtgaataccacgacgatttccggcagtttctacacatatattcgcaa  
gatgtggcgtgttacggtgaaaacctggcctatttccctaaaggggtttattgagaatatgttttctgctcagccaa  
tccctgggtgagtttaccaggttttgatttaaactgggccaatatggacaacttcttcgcccccggttttaccatgg  
gcaaatattatacgcaaggcgacaaggtgctgatgcgctggcgatttcaggttcacatgacgctgtgatggcttc  
catgtcggcagaatgcttaataatgcttaacacagtagtcgtagtggtggcagggcgggcgtaaaagatcctggatccg  
cttactaaaagccagataaacagtatgctgatttgcgcgtgatttttgcggtataagaatatatactgatagtata  
cccgaagtatgtcaaaaagaggtgtgctatgaagcagcgtattacagtgacagttgacagcgacagctatcagttgc  
tcaaggcatatatgatgtcaatatctccggtctggttaagcacacccatgcagaatgaagcccgctgctgctgctgccc  
aacgctggaaagcggaaaatcaggaagggtggtgaggtgcggcggtttattgaaatgaacggctcttttgcgtgac  
gagaacagggactgggtgaaatgcagtttaagggttacacctataaaagagagagccgttatcgctctgtttgtggatg  
tacagagtgatattattgacacgcccggcgacggatggtgatccccctggccagtgacagctctgctgtcagataaaa  
gtctcccgtgaactttacccggtgggtgcatatcggggatgaaagctggcgcatgatgaccacccgatatggccagtg  
gccggtctccggttatcggggaagaagtggctgatctcagccaccgcgaaaatgacatcaaaaacgccattaacctga

Table 31 (continued) Nucleotide sequence of pLenti4TO/V5-DEST SEQ ID NO: 115.

tgttctggggaatataaatgtcagggtccgttatcacagccaggtctgcaggtcgaccatagtgactggatatgttg  
tgttttacagtattatgtagtctgttttttatgcaaatctaatttaatatattgatatttatatcattttacgttt  
ctcgttcagctttcttgtaaaagtgggtgatatccagcacagtgggcgccgctcgagtcctagagggcccgcggttc  
gaaggtaagcctatccctaaccctctcctcgggtctcgattctacgcgtaccgggttagtaatgagtttggaattaatt  
ctgtggaatgtgtgtcagttaggggtgtggaagtccccagggtccccaggcaggcagaagtatgcaaagcatgcatc  
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tccccagcaggcagaagtatgcaaagcatgcatctcaattagtcagcaaccatagtcgcccccctaactccgccc  
cccgcccctaactccgcccagttccgcccattctccgcccattggctgactaatttttttttatgcaaggccg  
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gagcctggggagctctctggctaaactaggaaccactgcttaagcctcaataaagcttgcccttgagtgcttcaagta  
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tgtttattgcagcttataatggttacaaataaagcaatagcatcacaaatttcacaaataaagcatttttttctactg  
cattctagttgtgggtttgtccaaactcatcaatgtatcttatcatgtctggctctagctatcccgcccctaactccg  
cccatcccgcccctaactccgcccagttccgcccattctccgcccattggctgactaatttttttttatgtaga  
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ccttcccaacagttgcccagcctgaatggcgaatgggacgcgcctctgtagcggcgcatataagcgcggcggtgtggt  
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gacgttggagtcacagttctttaatagtgagctctgttccaaactggaacaacactcaaccctatctcggtctatt  
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catgggggatcatgtaactcgcccttgatcgttgggaaccggagctgaatgaagccataccaaacgacgagcgtgaca  
ccagatgcctgtagcaatggcaacaacgttgcgcaaaactattaactggcgaactacttactctagcttcccgga  
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tgctgataaatctggagccgggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggtaagccctcc  
gtatcgtagttatctacacgacggggagtcaggcaactatggatgaacgaaatagacagatcgctgagataggtgcc  
tactgattaagcattggtaactgtcagaccaagtttactcatatatacttttagattgatttaaaacttcattttta  
atttaaaaggatctaggtgaagatccttttgataatctcatgacaaaatcccttaacgtgagtttctgctccact  
gagcgtcagaccccgtagaaaagatcaaaggatcttcttgagatccttttttctgcgcgtaatctgctgcttgcaa  
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cttcagcagagcgcagataccaaataactgttcttctagtgtagccgtagttaggccaccacttcaagaactctgtag  
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ggagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgccacgcttcccgaaaggagaa  
aggcggacaggtatccggtgaagcggcaggggtcggaacaggagagcgcacgagggagcttccagggggaaacgcctgg  
tatctttatagtcctgtcgggtttcgccacctctgacttgagcgtcgattttttgtgatgctcgtcagggggcgagg

Table 31 (continued) Nucleotide sequence of pLenti4TO/V5-DEST SEQ ID NO: 115).

cctatggaaaaacgccagcaacgcggcctttttacgggttcctggccttttgctggccttttgetcacatgttctttc  
ctgcgttatcccctgattctgtggataaccgtattaccgcctttgagtgaagctgataccgctcgccgcagccgaacg  
accgagcgcagcgcagtcagtgagcgcaggaagcgcgaagagcgccaatacgcaaaccgcctctccccgcgcgttggcc  
gattcattaatgcagctggcacgacagggtttcccgactggaaagcgggcagtgagcgcgaacgcaattaatgtgagtt  
agctcactcattagggacccccaggctttacactttatgcttcgggctcgatgttggtgtggaattgtgagcggataa  
caatttcacacaggaaacagctatgaccatgattacgccaagcgcgcaattaaccctcactaaagggaacaaaagct  
ggagctgcaagctt

Please amend Table 32 on pages 457 and 458 as follows:

Table 32: Nucleotide sequence of pLenti6/TR (SEQ ID NO: 116).

```
aatgtagtcttatgcaatactctttagtcttgcacatggtaacgatgagttagcaacatgccttacaaggagaga
aaaagcaccgtgcatgccgattggtggaagtaaggtggtacgatcgtgccttatttaggaaggcaacagacgggtctg
acatggattggacgaaccactgaattgccgcatgacagagatattgtatttaagtgcctagctcgatacataaacgg
gtctctctggttagaccagatctgagcctgggagctctctggctaactaggggaaccactgcttaagcctcaataaa
gcttgcccttgagtgcctcaagtagtgtgtgcccgtctgttgtgtgactctggtaactagagatccctcagacccttt
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gactagcggaggctagaaggagagagatgggtgcgagagcgtcagatttaagcgggggagaattagatcgcgatggg
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cgattcgcagttaatcctggcctgttagaaacatcagaaggctgtagacaaatactgggacagctacaaccatccct
tcagacaggatcagaagaacttagatcattatataatacagtagcaaccctctattgtgtgcatcaaaggatagaga
taaaagacaccaaggaagctttagacaagatagaggaagagcaaaacaaaagtaagaccaccgcacagcaagcggcc
gctgatcttcagacctggaggaggagatattgagggacaattggagaagtgaattatataaatataaagtagtaaaaa
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taattgaagaatcgcaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagtgttggtg
aattgggttaacataacaaattggctgtggtatataaaattattcataatgatagtaggaggcttggtagggttaag
aatagtttttgcgtgactttctatagtgaatagagttaggcagggatattcaccattatcgtttcagacccacctcc
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ccttgaaattgatcatatgcggattagaaaaacaacttaaatgtgaaagtgggtccgcgtacagcggatcccgggaat
tctagagggcccgcggttcgaacaaaaactcatctcagaagaggatctgaatatgcataccgggttagtaatgagttt
```

Table 32 (continued) Nucleotide sequence of pLenti6/TR (SEQ ID NO: 116).

ggaattaattctgtggaatgtgtgtcagttaggggtgtggaagtccccagggtccccaggcaggcagaagtatgcaa  
agcatgcatctcaattagtcagcaaccaggtgtggaagtccccagggtccccagcaggcagaagtatgcaaagcat  
gcatctcaattagtcagcaaccatagtcgccccctaaactccgccccctaaactccgccccagttccgccc  
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tgatcagcagctgttgacaattaatcatcggcatagta  
taccggcatagtataatacagacaaggtgaggaactaaacctggccaagcctttgtctcaagaagaatccaccctca  
ttgaaagagcaacggctacaatacaacagcatccccatctctgaagactacagcgtcgccagcgcagctctctctagc  
gacggccgcatcttcaactgggtgtcaatgtatatcattttactgggggaccttgtgcagaactcgtgggtgctgggcac  
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gcgagcgtgcccagcaggtgcttctcgatctgcatcctgggatcaaagccatagtgaaggacagtgatggacagccg  
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taagaccaatgacttacaaggcagctgtagatcttagccacttttttaaagaaaaggggggactggaagggttaatt  
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agggattttgccgatttcggcctatttggttaaaaaatgagctgatttaacaaaaatttaacgcgaattttaacaaaa  
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attcaacatttccgtgtcgcccttattcccttttttgcggcattttgccttccgtgtttttgctcaccagaaaacgct  
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tgattctgtggataaacgtattaccgcttttgagttagctgataccgctcgccgcagccgaacgacggagcgcagcg  
agtcagtgagcaggaagcggaagagcgcccaatacgcgaacccgctctccccgcgcttggtcgattcattaatgc

Table 32 (continued) Nucleotide sequence of pLenti6/TR (SEQ ID NO: 116).

agctggcacgacaggtttcccgactggaaagcgggcagtgagcgcaacgcaattaatgtgagttagctcactcatta  
ggcaccccaggctttacactttatgcttccggctcgtatgttggtggaattgtgagcggataacaatttcacacag  
gaaacagctatgaccatgattacgccaagcgcgcaattaaccctcactaaagggaacaaaagctggagctgcaagct  
t

Please amend Table 33 on pages 459 and 460 as follows:

Table 33: Nucleotide sequence of pLenti6/V5 (SEQ ID NO: 117).

```
aatgtagtcttatgcaatactctttagtcttgcacatggtaacgatgagtttagcaacatgccttacaaggagaga
aaaagcaccgtgcatgccgattgggtggaagtaaggtggtagcgtgccttatttaggaaggcaacagacgggtctg
acatggattggacgaaccactgaattgccgcattgcagagatattgtattttaagtgcctagctcgatacataaacgg
gtctctctggttagaccagatctgagcctgggagctctctggctaactagggaaaccactgcttaagcctcaataaa
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aaaaaattcgggttaaggccagggggaaagaaaaaataaaattaaaacatatagtagggcaagcagggagctagaa
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caaccccgaggggacccgacaggcccgaaaggaatagaagaagaaggtggagagagagacagagacagatccattcga
ttagtgaaacggatctcgacgggtatcgataagcttgggagttccgcgttacataacttacggtaaatggcccgctgg
ctgaccgcccaacggaaccccgccattgacgtcaataatgacgtatgttcccatagtaaacgccaatagggactttcc
attgacgtcaatgggtggagtatttacggtaaaactgccacttggcagtagcatcaagtgtatcatatgccaaagtagc
ccccctattgacgtcaatgacggtaaatggcccgccctggcattatgccagtagcatgaccttatgggactttcctac
ttggcagtagcatctacgtatttagtcacgtattaccatgggtgatgcggttttggcagtagcatcaatgggcgtggat
agcgggttgactcacggggatttccaagtctccacccattgacgtcaatgggagtttgttttggcaccaaaatcaa
cgggactttccaaaatgtcgtaacaactccgccccattgacgcaaatgggcggtaggcgtgtacggtgggaggtcta
tataagcagagctcggttagtgaaacgtcagatcgccctggagacgccatccacgctgttttgacctccatagaagac
accgactctagaggatccactagtcagtggttggaattctgcagatatccagcacagtgggcgccgctcgagctct
agagggcccgcggttcgaaggttaagcctatccctaaccctctcctcggtctcgattctacgctaccggttagtaat
gagtttggaaatgaattctgtggaatgtgtgtcagttaggggtggaaagtcccaggctcccaggcaggcagaagtagca
atgcaaaagcatgcatctcaattagtcagcaaccatagtcggcccccactccgccccatccgccccactccgccccagt
ccgccccattctccgccccatggctgactaattttttttatattatgcagaggccgaggccgctctgcctctgagcta
ttccagaagtagtgaggagggttttttggaggcctaggcttttgcaaaaagctccggggagcttgatatatccatttt
cggatctgatcagcacgtgttgacaattaatcatcgccatagtatatcgccatagtataatacgaacaaggtgaggaa
ctaaaccatggccaagcctttgtctcaagaagaatccaccctcattgaaagagcaacggctacaatcaacagcatcc
ccatctctgaagactacagcgtcgccagcgcagctctctctagcgacggccgcatcttcactgggtgtcaatgtatat
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atcctgggatcaaagccatagtgaaagcagtgatggacagccgacggcagttgggattcgtgaattgcccctct
gggtatgtgtgggagggcctaagcacaattcgagctcggtacctttaagaccaatgacttacaaggcagctgtagatc
ttagccacttttttaaagaaaaggggggactggaagggtcaattcactcccaacgaagacaagatctgctttttgct
tgtactgggtctctctggttagaccagatctgagcctgggagctctctggctaactagggaaaccactgcttaagcc
tcaataaagcttgcccttgagtgcctcaagtagtgtgtgcccgtctgtgtgtgactctggtaactagagatccctca
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aagaaatgaatatcagagagtgagaggaactgtttattgcagcttataatggttacaaataaagcaatagcatcac
aaatttcacaaataaagcatttttttctactgcattctagtgtgtggtttgtccaaactcatcaatgtatcttatcatg
```

Table 33 (continued) Nucleotide sequence of pLenti6/V5 (SEQ ID NO: 117).

tctggctctagctatccccgccctaactccgcccatcccgcccctaactccgccagttccgccatttctccgcccc  
atggctgactaattttttttatgtatgcagaggccgaggccgcctcgccctctgagctattccagaagtagtgagga  
ggcttttttgaggccctagggacgtacccaattcgccctatagttagtctgtattacgcgcgctcactggcgcgtctt  
ttacaacgtcgtgactgggaaaaccctggcgttacccaacttaatcgcccttgacgacatcccccttccgacgctg  
gcgtaatagcgaagaggcccgacccgatcgcccttcccaacagttgcgacgctgaatggcgaatgggacgcgcct  
gtagcggcgcatgaagcgcggcggtgtggtggttacg  
cgcagcgtgaccgctacacttgccagcgccttagcgcgcctcctttcgtttcttcccttcccttctccgacgctt  
cgccggctttccccgctcaagctctaaatcggggctcccttttaggggttccgatttagtgctttacggcaccctcgacc  
ccaaaaaacttgattaggggtgatgggtcacgtagtgggccatcgccctgatagacgggttttccgctttgacggtg  
gagtcacggttctttaatagtggactcttggtccaaaactggaacaacactcaaccctatctcgggtctattcttttga  
tttataagggattttgcccatttcggcctattgggttaaaaaatgagctgatttaacaaaaatttaacgcgaatttta  
acaaaatattaacgcttacaatttaggtggcacttttcggggaaatgtgcgcggaacccctatttggtttattttct  
aaatacattcaaatatgtatccgctcatgagacaataaccctgataaatgcttcaataatattgaaaaaggaagagt  
atgagatttcaacatttccgtgtcgcccttattcccttttttgccgcattttgcccttccgtgtttttgctcaccaga  
aacgctggtgaaagttaaagatgctgaagatcagttgggtgcacgagtggttacatcgaactggatctcaacagcg  
gtaagatccttgagagttttcgcgccgaagaacggttttccaatgatgagcacttttaagttctgctatgtggcgcg  
gtattatcccgatttgacgcgggcaagagcaactcggtcgccgcatacactattctcagaatgataaccatgggtgagta  
ctcaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgctgccataaccatgagtg  
ataacactgcgcccaacttacttctgacaacgatcgaggaccgaaggagctaaccgcttttttgcaaacatgggg  
gatcatgtaactcgcttgatcggttggaacccggagctgaatgaagccataccaaacgacgagcgtgacaccacgat  
gcctgtagcaatggcaacaacggtgcgcaaaactattaactggcgaactacttactctagcttcccggaacaattaa  
tagactggatggaggcgataaagttgcaggaccacttctgcgctcgcccttccggctgggtgtttattgctgat  
aaatctggagccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggtaagccctcccgatcgt  
agttatctacacgacggggagtcaggcaactatggatgaacgaaatagacagatcgctgagataggtgcctcactga  
ttaagcatttggttaactgtcagaccaagtttactcatatatacttttagattgatttaaaacttcatttttaatttaa  
aggatctaggtagaagatcctttttgataatctcatgacccaaaatcccttaacgtgagttttcggtccactgagcgtc  
agaccccgtagaaaagatcaaaggatcttcttgagatcctttttttctgcgcgtaatctgctgcttgcaaacaaaa  
aaccaccgctaccagcgggtggtttgtttgcccgtcaagagctaccaactctttttccgaaggtaactggcttcagc  
agagcgcagataccaaatactgttcttctagtgtagccgtagttaggccaccacttcaagaactctgtagcaccgcc  
tacatacctcgctctgctaactcctgttaccagtggtgctgcccagtgggcataagtcgtgtcttaccgggttgact  
caagacgatagttaccggataaggcgacggtcggttgacgggggttcgtgcacacagcccagcttgaggcga  
acgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgccacgcttccgaaggagaaaggcgga  
caggatccggtaagcggcagggtcggaacaggagagcgcacgaggagcttccagggggaaacgcctggatcttt  
atagtcctgtcgggtttcgcacacctgacttgagcgtcgatttttgatgctcgtcagggggcgaggcctatgg  
aaaaacgcgcaacgcggcctttttacgggttccgtggccttttgctggccttttgctcacatgttcttccctgcgtt  
atccctgatttctgtgataaacgtattaccgcctttgagtgagctgataccgctcgccgcagccgaacgaccgagc  
gcagcgagtcagtgagcgaggaagcggaagagcgcccaatacgcgaaccgccttccccgcgcgttgggcgattcat  
taatgcagctggcacgacaggtttcccgactggaaagcgggcagtgagcgcaacgcaattaatgtgagtttagctcac  
tcattaggcaccacaggtttacactttatgcttccggctcgatgttggtggaattgtgagcggataacaatttc  
acacaggaacagctatgaccatgattacgcgaagcgcgcaattaaccctcactaaaggggaacaaaagctggagctg  
caagctt



Please amend Table 34 on pages 461 and 462 as follows:

Table 34: Nucleotide sequence of pLenti3/V5-TREx (SEQ ID NO: 118).

```
aatgtagtcttatgcaatactcttgtagtcttgcaacatggtaacgatgagtttagcaacatgccttacaaggagaga
aaaagcaccgtgcatgccgattggtggaagtaaggtggtacgatcgtgccttatttaggaaggcaacagacgggtctg
acatggattggacgaaccactgaattgccgcattgcagagatattgtatttaagtgcctagctcgatacataaacgg
gtctctctggttagaccagatctgagcctgggagctctctggctaactagggaaacccactgcttaagcctcaataaa
gcttgccctgagtgcttcaagtagtgtgtgcccgtctgtgtgtgactctggttaactagagatccctcagacccttt
tagtcagtggtgaaaatctctagcagtgccgcacggcaagagggcgagggcgactgaaagcgaaagggaaaccagaggagctctct
cgacgcaggactcggccttgctgaagcgcgcacggcaagagggcgagggcgactggtgagtagcgccaaaaatctt
gactagcggaggctagaaggagagagatgggtgagagagcgtagtattaagcgggggagaattagatcgcgatggg
aaaaaattcggttaaggccagggggaaagaaaaaataaaattaaaacatatagtagggcaagcagggagctagaa
cgattcgcagttaatcctggcctgttagaaacatcagaaggctgtagacaaatactgggacagctacaaccatccct
tcagacaggatcagaagaacttagatcattatataatacagtagcaaccctctattgtgtgcatcaaaggatagaga
taaaagacaccaaggaagcttttagacaagatagaggaagagcaaaaacaaaagtaagaccaccgcacagcaagcggcc
gctgatcttcagacctggaggaggagatatgagggacaattggagaagtgaattatataaatataaagtagtaaaaa
ttgaaccattaggagtagcaccaccaaggcaagagaagagtggtgcagagagaaaaagagcagtggggaatagga
gctttgttccttggttcttgaggagcagcaggaagcactatgggcgcagcgtcaatgacgctgacggtagcaggccag
acaattattgtctggtatagtgacgcagcagacaacaatttgctgagggctattgaggcgcaacagcatctgttgcaac
tcacagctctggggcatcaagcagctccaggcaagaatcctggctgtggaaaagatacctaaggatcaacagctcctg
gggatttggggttgctctggaaaactcatttgaccactgctgtgccttggaatgctagttggagtaataaatctct
ggaacagatttggaatcacacgacctggatggagtgaggacagagaaattaacaattacacaagcttaatacactcct
taattgaagaatcgaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagtttgtgg
aattgggttaacataacaaattggctgtggtatataaaattattcataatgatagtaggaggcttggtaggtttaag
aatagtttttgcgtgactttctatagtgaaatagagttaggcagggatattcaccattatcgtttcagacccacctcc
caaccccgaggggacccgacaggcccgaaaggaatagaagaagaaggtggagagagagacagagacagatccattcga
ttagtgaacggatctcgacgggtatcgataagcttgaggagtccgcgttacataacttacggtaaatggcccgctgg
ctgacgcgcccaacgacccccgccattgacgtcaataatgacgtatggtcccatagtaacgcccaatagggaacttcc
attgacgtcaatgggtggagttttacggtaaaactgccacttggcagtacatcaagtgtatcatatgccaaagtacg
ccccctattgacgtcaatgacggtaaatggcccgccctggcattatgccagtagacatgaccttatgggactttcctac
ttggcagtagacatctacgtattagtcacgtctattaccatgggtgatgcggttttggcagtagacatcaatgggcgtggat
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cgggactttccaaaatgtcgtaacaactccgccccattgacgcaaatgggcggtaggcgtgtacggtgggaggtcta
tataagcagagctctccctatcagtgatagagatctccctatcagtgatagagatcgtcgacgagctcgtttagtga
accgtcagatcgctggagacgccatccacgctgttttgacctccatagaagacaccgggaccgatccagcctccgg
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ctcctcggctctcgattctacgctacgggttagtaattgagtttggaattaattctgtggaatgtgtgtcagttaggg
tgtggaaagtccccaggctccccaggcaggcagaagtagcaaaagcatgcatctcaattagtcagcaaccatagtcgccgcc
ctaactccgccccatcccgccccctaactccgcccagttccgccccattctccgccccatggctgactaatttttttat
ttatgcagaggccgaggccgctctgctctgagctattccagaagtagtgaggaggcttttttgaggcctaggct
tttgcaaaaagctccccctgttgacaattaatcatcggcatagtatatcggcatagtataatacagacaaggtgagga
actaaaccatggcctcaattgaacaagatggattgcacgcaggttctccggccgcttggtgagaggctattcggc
tatgactgggcacaacagacaatcggtgctctgatgcgcgcgtgttccggctgtcagcgcagggggcgcccggttct
ttttgtcaagaccgacctgtccggtgcctgaatgaactgcaggacgagggcagcgcggtatcgtggctggccacga
cgggcgttcttgccgagctgtgctcgagctgtgctgactgaagcgggaaggaggtggtgctatggggcgaagtgcgcg
gggaggatctcctgtcatctcacctgtctgtctgccgagaagtagtccatcatggctgagtgcaatgcggcggtgca
tacgcttgatccggctacctgccattcgaccaccaagcgaaacatcgcatcgagcagacgtagctcggatggaag
ccggtcttgctgatcaggatgatctggacgaagagcatcaggggctcgccgacccgaactgttcgccagggtcaag
gcgcgcagtcgccgacggcgaggatctcgtcgtgacccatggcgatgcctgcttgccgaatatcatggtggaaaatgg
ccgcttttctggattcatcgactgtggccggctgggtgtggcgagaccgctatcaggacatagcgttggttaccgctg
atattgctgaagagcttggcggcgaaatgggctgaccgcttctcgtgctttacggtagtcggcgtcccgatccgcag
cgcatcgcccttctatcgcccttcttgacgagttcttctgagcgggactctgggggttcgaaatgaccgaccaagcgagc
cccaacctgccatcacgagtttaaactggtagctttaagaccaatgacttacaaggcagctgtagatcttagccact
```

Table 34 (continued) Nucleotide sequence of pLenti3/V5-TREx (SEQ ID NO: 118).

ttttaaaagaaaaggggggactggaagggttaattcactcccaacgaagacaagatctgctttttgcttgactggg  
tctctctgggttagaccagatctgagcctgggagctctctgggtaactagggaaaccactgcttaagcctcaataaag  
cttgcccttgagtgtctcaagtagtggtgcccgtctgttggtgactctggtaactagagatccctcagaccctttt  
agtcagtggtgaaaatctctagcagtagtagttcatgtcatcttattattcagtatattataacttgcaaagaaatga  
atatcagagagtgagaggaacttggttattgcagcttataatggttacaaataaagcaatagcatcacaaatttcac  
aaataaagcatttttttactgcatcttagttgtggtttgtccaaactcatcaatgtatcttatcatgtctggctct  
agctatccccgcccctaactccgcccattcccgccct  
aactccgcccagttccgcccattctccgcccattggctgactaattttttttatattatgcagaggccgaggccgct  
cggcctctgagctattccagaagtagtgaggaggcttttttggaggcctagggacgtacccaattcgccctatagtg  
agtcgtattacgcgcgctcactggccgtcggtttacaacgtcgtagctgggaaaaccctggcggtacccaactta  
cgcccttgccagcacatccccctttcgccagctggcgtaatagcgaagaggcccgacccgatcgcccttcccaacagtt  
gcgagcctgaatggcgaatgggacgcgcctgtagcggcgcatgaagcgcggcggtgtggtggttacgcgcagcg  
tgaccgctacacttgccagcgccttagcgcgcgctcctttcgctttctcccttcccttctcgccacgttcgcggc  
tttccccgtcaagctctaaatcgggggctcccttttagggttccgatttagtgctttacggcacctcgaccccaaaaa  
acttgattaggggtgatgggtcacgtagtgggccatcgccctgatagacgggttttccgccccttgacgttgagtgca  
cgctcttttaatagtgagctctgtttccaaactggaacaactcaaccctatctcggtctattctttgattataa  
gggattttgcccagatttcggcctattggttaaaaaatgagctgatttaacaaaaatttaacgcgaattttaacaaaat  
attaacgcttacaatttaggtggcacttttccgggaaatgtgcgcggaaccctatttggtttatttttctaaataca  
ttcaaatatgtatccgctcatgagacaataaccctgataaatgcttcaataatattgaaaaaggaagagtatgagta  
ttcaacatttccgtgtcgcccttattcccttttttgcggcattttgccttccctgttttgcctcaccagaaacgctg  
gtgaaagtaaaagatgctgaagatcagttgggtgcacgagtggttacatcgaactggatctcaacagcggtaagat  
ccttgagagttttcgccccgaagaacgttttccaatgatgagcacttttaaaagttctgctatgtggcgcggtattat  
cccgtattgacgcggggaagagcaactcggctcgccgcatacactattctcagaatgacttggttgagtactacca  
gtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgtgcccataaccatgagtataaacac  
tgccgccaacttacttctgacaacgatcggaggaccgaaggagctaacgcgttttttgacacacatgggggatcatg  
taactcgcccttgatcggtgggaaccggagctgaatgaagccataccaaacgacgagcgtgacaccacgatgcctgta  
gcaatggcaacaacgttgccgcaaaactattaactggcgaactacttactctagcttccccggcaacaattaatagactg  
gatggaggcggtataaagttgcaggaccacttctgcgctcgcccttccggctggctgggtttattgctgataaatctg  
gagccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggtaagccctcccgatctgtagttatc  
tacacgacggggagtcaggcaactatggatgaacgaaatagacagatcgctgagataggtgcctcactgattaagca  
ttggtaactgtcagaccaagtttactcatatatacttttagattgatttaaaacttcattttttaatttaaaaggatct  
aggtgaagatccctttttgataatctcatgacaaaatcccttaacgtgagttttcggtccactgagcgtcagacccc  
gtagaaaagatcaaaggatcttcttgagatcccttttttctgcgcgtaattctgctgcttgcaaacaaaaaaaccacc  
gctaccagcgggtggtttgtttgcccgatcaagagctaccaactctttttccgaaggtaactggcttcagcagagcgc  
agataccaaatactgttcttcttagtgtagcgttagtgccaccacttcaagaactctgtagcaccgcctacatac  
ctcgtctctgtaactctgttaccagtggtgctgctgccagtgggcgataagtcgtgtcttaccgggttggtgactcaagacg  
atagttaccggataaaggcgcagcggctcgggctgaacgggggggttcgtgcacacagcccagcttgagcggaacgacct  
acaccgaactgagatacctacagcgtgagctatgagaaagcgccacgcttcccgaaggagaaaggcggacaggtat  
ccggtaagcggcaggggtcggaacaggagagcgcacgagggagcttccagggggaaacgcctgggtatctttatagtc  
tgtcgggtttcgccacctctgacttgagcgtcgatttttgtgatgctcgtcagggggggcgagcctatggaaaaacg  
ccagcaacgcggcctttttacgggttccctggccttttgcctggttgcctcacatgttcttttccgttatccct  
gattctgtggataaccgtattaccgcctttgagtgagctgataccgctcgccgcagccgaacgaccgagcgcagcga  
gtcagtgagcgagggaagcggaagagcgccaataacgcaaacgcctctcccgcgcgttgggcgattcattaatgca  
gctggcacgacaggtttcccgactggaaagcgggcagtgagcgcaacgcaattaatgtgagttagctcactcattag  
gcacccaggttttacactttatgcttccggctcgatgttggtgtggaattgtgagcggataacaatttcacacagg  
aaacagctatgaccatgattacgccaagcgcgcaattaaccctcactaaagggaacaaaagctggagctgcaagctt

Please amend Table 35 on page 463 as follows:

Table 35: Nucleotide sequence of a nucleic acid fragment containing the tetracycline repressor coding sequence (SEQ ID NO: 119).

```
agcttggtacccgggcatcctctagggcctctgagctattccagaagtagtgaagaggcttttttggaggcctaggc
ttttgcaaaaagctccggatcgatcctgagaacttcagggtagtctggggacccttgattgttctttcttttctgc
tattgtaaaattcatgttatatggagggggcaaagttttcaggggtgttgtttagaatgggaagatgtcccttgatc
accatggaccctcatgataattttgtttctttcactttctactctgttgacaaccattgtctctcttattttcttt
tcattttctgtaactttttcgttaaacttttagcttgcatttgtaacgaatttttaaattcacttttgtttatttgtc
agattgtaagtactttctctaatacactttttttcaaggcaatcaggggtatattatattgtacttcagcacagtttt
agagaacaattgttataattaaatgataaggtagaatatttctgcatataaattctggctggcggtggaaatattctt
attggtagaaacaactacatcctgggtcatcatcctgcctttctctttatgggtacaatgatatacactgtttgagat
gaggataaaatactctgagtcctaaaccggggccctctgctaaccatgttcatgccttcttcttttctacagctcc
tgggcaacgtgctggttattgtgctgtctcatcattttggcaaagaattgtaatacgactcactatagggcgaattg
atatgtctagattagataaaaagtaaagtgattaacagcgcattagagctgcttaatgaggtcggaatcgaaggttta
acaaccgtaaaactcgcccagaagctagggtgtagagcagcctacattgtattggcatgtaaaaaataagcgggcttt
gctcgacgccttagccattgagatgtagataggcaccatactcacttttgccctttagaaggggaaagctggcaag
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acacggcctacagaaaaacagtatgaaactctcgaaaatcaattagcctttttatgccacaagggttttctactaga
gaatgcattatatgcactcagcgtgtggggcattttactttagggttgcgtattggaagatcaagagcatcaagtcg
ctaaagaagaaagggaacacactactgatagtatgccgccattattacgacaagctatcgaattattttgatcac
caagggtgcagagccagccttcttattcggccttgaattgatcatatgcggattagaaaaacaacttaaatgtgaaag
tgggtccgctacagcggatcccggaattctagagggcccgcggttcgaacaaaaactcatctcagaagaggatct
gaatatgcata
```

Please amend Table 36 on pages 464 and 465 as follows:

Table 36: Nucleotide sequence of pRRL6/V5 also referred to as pLenti6/V5 (SEQ ID NO: 120).

1	aatgtagtct	tatgcaatac	tctttagtagtc	ttgcaacatg	gtaacgatga	gtttagcaaca
61	tgccttacaa	ggagagaaaa	agcaccgtgc	atgccgattg	gtggaagtaa	gggtggtacga
121	tcgtgcctta	ttaggaaggc	aacagacggg	tctgacatgg	attggacgaa	ccactgaatt
181	gccgcattgc	agagatattg	tattttaagtg	cctagctcga	tacaataaac	gggtctctct
241	ggtttagacca	gatctgagcc	tgggagctct	ctggctaact	agggaaaccca	ctgcttaagc
301	ctcaataaag	cttgcccttga	gtgcttcaag	tagtgtgtgc	ccgtctgttg	tgtgactctg
361	gtaactagag	atccctcaga	cccttttagt	cagtgtggaa	aatctctagc	agtggcgccc
421	gaacagggag	ctgaaagcga	aagggaaacc	agagctctct	cgacgcagga	ctcggcttgc
481	tgaagcgcg	acggcaagag	gcgaggggag	gcgactggtg	agtacgccaa	aaattttgac
541	tagcggaggc	tagaaggaga	gagatgggtg	cgagagcgct	agtattaagc	gggggagaat
601	tagatcgcg	tgggaaaaaa	ttcgggttaag	gccaggggga	aagaaaaaat	ataaattaaa
661	acatatagta	tgggcaagca	gggagctaga	acgattcgca	gttaatcctg	gcctgttaga
721	aacatcagaa	ggctgtagac	aaatactggg	acagctacaa	ccatcccttc	agacaggatc
781	agaagaactt	agatcattat	ataatacagt	agcaaccctc	tatttgtgtg	atcaaaggat
841	agagataaaa	gacaccaagg	aagctttaga	caagatagag	gaagagcaaa	acaaaagtaa
901	gaccaccgca	cagcaagcgg	ccgctgatct	tcagacctgg	aggaggagat	atgagggaca
961	attggagaag	tgaattatat	aaatataaag	tagtaaaaaa	tgaaccatta	ggagtagcac
1021	ccaccaaggc	aaagagaaga	gtggtgcaga	gagaaaaaag	agcagtggga	ataggagctt
1081	tgttccttgg	gttcttggga	gcagcaggaa	gcactatggg	cgcagcctca	atgacgtgga
1141	cggtagcagg	cagacaatta	ttgtctggta	tagtgcagca	gcagaacaat	ttgtgagggg
1201	ctattgaggg	gcaacagcat	ctgttgcaac	tcacagtctg	gggcatcaag	cagctccagg
1261	caagaatcct	ggctgtggaa	agatacctaa	aggatcaaca	gctcctgggg	atttgggggt
1321	gctctggaaa	actcatttgc	accactgctg	tgccttggaa	tgctagttag	agtaataaat
1381	ctctggaaaca	gattggaatc	acacgacctg	gatggagtg	gacagagaaa	ttacaatta
1441	cacaagctta	atacactcct	taattgaaga	atcgcaaaac	cagcaagaaa	agaatgaaca
1501	agaattattg	gaattagata	aatgggcaag	tttgtggaat	tggtttaaca	taacaaattg
1561	gctgtggtat	ataaaattat	tcataatgat	agtaggaggc	ttggtaggtt	taagaatagt
1621	ttttgctgta	ctttctatag	tgaatagagt	taggcaggga	tattcaccat	tatcgtttca
1681	gacccacctc	ccaaccccca	ggggacctga	caggccccga	ggaatagaag	aagaagggtg
1741	agagagagac	agagacagat	ccattcgatt	agtgaacgga	tctcgacggt	atcgataagc
1801	ttgggagttc	cgcgttacat	aacttacggg	aaatggcccc	cctggctgac	cgcccaacga
1861	cccccgccca	ttgacgtcaa	taatgacgta	tgttcccata	gtaacgcca	tagggacttt
1921	ccattgacgt	caatgggtgg	agtattttac	gtaaaactgc	cacttggcag	tacatcaagt
1981	gtatcatatg	ccaagtacgc	cccctattga	cgtcaatgac	ggtaaatggc	ccgcctggca
2041	ttatgcccag	tacatgacct	tatgggactt	tcctacttgg	cagtacatct	acgtattagt
2101	catcgctatt	accatgggtga	tgcggttttg	gcagtacatc	aatgggctgt	gatagcgggt
2161	tgactcacgg	ggatttccaa	gtctccacce	cattgacgtc	aatgggagtt	tgttttggca
2221	ccaaaatcaa	cgggactttc	caaaaatgtc	taacaactcc	gccccattga	cgcaaatggg
2281	cggtaggcgt	gtacgggtgg	aggtctatat	aagcagagct	cgttttagtga	accgtcagat
2341	cgcctggaga	cgccatccac	gctgttttga	cctccataga	agacaccgac	tctagaggat
2401	ccactagtcc	agtgtggtgg	aattctgcag	atatccagca	cagtggcggc	cgctcgagtc
2461	tagagggccc	gcggttcgaa	ggtaagccta	tcocctaacc	tctcctcggt	ctcgattcta
2521	cgcgtaccgg	ttagtaatga	gtttggcctg	ctgccggctc	tgccggcctc	tccgcgtctt
2581	cgccttcgcc	ctcagacgag	tcggatctcc	ctttggggcc	cctccccgcc	tggaaattaat
2641	tctgtggaat	gtgtgtcagt	tagggtgtgg	aaagtcccca	ggctccccag	gcaggcagaa
2701	gtatgcaaa	catgcatctc	aattagtcag	caaccagggt	tggaaaagtcc	ccaggctccc
2761	cagcaggcag	aagtatgcaa	agcatgcac	tcaattagtc	agcaaccata	gtcccccccc
2821	taactccgcc	catcccgccc	ctaaactccg	ccagttccgc	ccattctccg	ccccatggct
2881	gactaatttt	ttttatttat	gcagaggccg	aggccgcctc	tgctcttgag	ctattccaga
2941	agtagtgagg	aggctttttt	ggaggcctag	gcttttgcaa	aaagctcccc	ggagcttgta
3001	tatccatttt	cggatctgat	cagcacgtgt	tgacaattaa	tcatcggcac	agtatatcgg
3061	catagtataa	tacgacaagg	tgaggaacta	aacccatggc	aagcctttgt	ctcaagaaga

Table 36 (continued) Nucleotide sequence of pRRL6/V5 also referred to as pLenti6/V5  
(SEQ ID NO: 120).

3121	atccaccctc	attgaaagag	caacggctac	aatcaacagc	atccccatct	ctgaagacta
3181	cagcgtcgcc	agcgcagctc	tctctagcga	cggccgcctc	ttcactgggtg	tcaatgtata
3241	tcatttttact	gggggacctt	gtgcagaact	cgtgggtgctg	ggcactgctg	ctgctgcggc
3301	agctggcaac	ctgacttgta	tcgtcgcgat	cggaaatgag	aacaggggca	tcttgagccc
3361	ctgcggaacg	tgccgacagg	tgcttctcga	tctgcctcct	gggatcaaag	ccatagtga
3421	ggacagtgat	ggacagccga	cggcagttgg	gattcgtgaa	ttgctgccct	ctggttatgt
3481	gtgggagggc	taagcacaat	tcgagctcgg	tacctttaag	accaatgact	tacaaggcag
3541	ctgtagatct	tagccacttt	ttaaaagaaa	aggggggact	ggaagggcta	attcactccc
3601	aacgaagaca	agatctgctt	tttgcttgta	ctgggtctct	ctggttagac	cagatctgag
3661	cctgggagct	ctctggctaa	ctagggaacc	cactgcttaa	gcctcaataa	agcttgccct
3721	gagtgcctca	agtagtgtgt	gcccgtctgt	tgtgtgactc	tggttaactag	agatccctca
3781	gaccctttta	gtcagtgtgg	aaaatctcta	gcagtagtag	ttcatgtcat	cttattattc
3841	agtattttata	acttgcaaag	aaatgaatat	cagagagtga	gaggaacttg	tttattgcag
3901	cttataatgg	ttacaaataa	agcaatagca	tcacaaat	cacaaataaa	gcattttttt
3961	cactgcattc	tagttgtggt	ttgtccaaac	tcacaaat	atcttatcat	gtctggctct
4021	agctatcccg	cccctaactc	cgccagttc	cgccattctc	ccgccccatg	gctgactaat
4081	tttttttatt	tatgcagagg	ccgaggccgc	ctcgccctct	gagctattcc	agaagtagtg
4141	aggaggcttt	tttgagggcc	taggcttttg	cgtcgagacg	taccaatttc	gccctatagt
4201	gagtgcgtatt	acgcgcgctc	actggccgctc	gttttacaac	gtcgtgactg	ggaaaaccct
4261	ggcgttacc	aacttaatcg	ccttgacgca	catccccctt	tcgccagctg	gcgtaatagc
4321	gaagaggccc	gcaccgatcg	cccttcccaa	cagttgcgca	gcctgaatgg	cgaatggcgc
4381	gacgcgccct	gtagcggcgc	attaagcgcg	gcgggtgtgg	tggttacgcg	cagcgtgacc
4441	gtacacttg	ccagcgccct	agcgcgccct	cctttcgctt	tcttcccttc	ctttctcgcc
4501	acgttcgccg	gctttccccg	tcaagctcta	aatcgggggc	tcccttttagg	gttccgattt
4561	agtgcctttac	ggcacctcga	ccccaaaaaa	cttgattagg	gtgatggttc	acgtagtggg
4621	ccatcgccct	gatagacggg	ttttcgccct	ttgacgttgg	agtcacacgt	ctttaatagt
4681	ggactccttg	tccaaactgg	aacaacactc	aacctatct	cgggtctattc	ttttgattta
4741	taagggtattt	tgccgatttc	ggcctatttg	ttaaaaaatg	agctgattta	acaaaaat
4801	aacgcgaatt	ttacaaaaat	attaacgttt	acaatttccc	agggtggcact	tttcggggaa
4861	atgtgcgcgg	aacctctatt	tgtttatttt	tctaaataca	ttcaaataatg	tatccgctca
4921	tgagacaata	accctgataa	atgcttcaat	aatattgaaa	aaggaagagt	atgagtattc
4981	aacattttccg	tgctgcgccct	attccctttt	ttgcggcatt	ttgccttccct	gtttttgctc
5041	acccagaaac	gctgggtgaaa	gtaaaagatg	ctgaagatca	gttgggtgca	cgagtgggtt
5101	acatcgaact	ggatctcaac	agcggtaaga	tccttgagag	ttttcgcccc	gaagaacgtt
5161	ttccaatgat	gagcactttt	aaagttctgc	tatgtggcgc	ggatttatcc	cgttagtagc
5221	ccgggcaaga	gcaactcggg	cgccgcatac	actattctca	gaatgacttg	gttgtagtact
5281	caccagtcac	agaaaagcat	cttacgggatg	gcacacagct	aagagaatta	tgacgtgctg
5341	ccataaccat	gagtataaac	actgcggcca	acttacttct	gacaacgac	ggaggaccga
5401	aggagctaac	cgcttttttg	cacaacatgg	gggatcatgt	aactcgcctt	gatcgttggg
5461	aaccggagct	gaatgaagcc	ataccaaacg	acgagcgtga	caccacgatg	cctgtagcaa
5521	tggaacaac	gttgcgcaaa	ctattaactg	gcgaactact	tactctagct	ccccggcaac
5581	aattaataga	ctggatggag	gcggataaag	ttgcaggacc	acttctgcgc	tcggcccttc
5641	cggctggctg	gtttattgct	gataaatctg	gagccggtga	gcgtgggtct	cgcggtatca
5701	ttgcagcact	ggggccagat	ggtgaagcct	cccgtatcgt	agttatctac	acgacgggga
5761	gtcaggcaac	tatggatgaa	cgaaatagac	agatcgctga	gataggtgcc	tcactgatta
5821	agcattggta	actgtcagac	caagtttact	catatatact	ttagattgat	ttaaaacttc
5881	atttttaatt	taaaaggatc	taggtgaaga	tcctttttga	taatctcatg	acaaaaatcc
5941	cttaacgtga	gttttcgttc	cactgagcgt	cagaccccg	agaaaagatc	aaaggatcct
6001	cttgagatcc	tttttttctg	cgcgtaatct	gctgcttgca	aacaaaaaaa	ccaccgctac
6061	cagcgggtgg	ttgtttgccc	gatcaagagc	taccaactct	ttttccgaag	gtaactggct
6121	tcagcagagc	gcagatacca	aatactgtcc	ttctagtgtg	gccgtagtta	ggccaccact
6181	tcaagaactc	tgtagcaccg	cctacatacc	tcgctctgct	aatcctgtta	ccagtggctg
6241	ctgccagtg	cgataagtcg	tgtcttaccg	ggttggaactc	aagacgatag	ttaccggata
6301	aggcgcagcg	gtcgggctga	acgggggggt	cgtgcacaca	gccagcttg	gagcgaacga

Table 36 (continued) Nucleotide sequence of pRRL6/V5 also referred to as pLenti6/V5  
(SEQ ID NO: 120).

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6361 cctacaccga actgagatac ctacagcgtg agctatgaga aagcgccacg cttcccgaag
6421 ggagaaaggc ggacaggatc cgggtaagcg gcagggtcgg aacaggagag cgcacgaggg
6481 agcttccagg gggaaacgcc tggatatctt atagtcctgt cgggtttcgc cacctctgac
6541 ttgagcgtcg atttttgtga tgctcgtcag gggggcggag cctatggaaa aacgccagca
6601 acgcggcctt tttacggttc ctggcctttt gctggccttt tgctcacatg ttctttcctg
6661 cgttatcccc tgattctgtg gataaccgta ttaccgcctt tgagtgaagt gataccgctc
6721 gccgcagccg aacgaccgag cgcagcgagt cagtgcgcga ggaagcggaa gagcgcccaa
6781 tacgcaaacc gcctctcccc gcgcgttggc cgattcatta atgcagctgg cacgacaggt
6841 ttcccgaact gaaagcgggc agtgagcgca acgcaattaa tgtgagttag ctactcatt
6901 aggcacccca ggctttacac tttatgcttc cggctcgatg gttgtgtgga attgtgagcg
6961 gataacaatt tcacacagga aacagctatg accatgatta cgccaagcgc gcaattaacc
7021 ctactactaa ggaacaaaag ctggagctgc aagctt
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At the end of the application, and before the drawings, please insert the sequence listing attached hereto.